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TREASURY DEPARTMENT

PUBLIC HEALTH REPORTS

ISSUED WEEKLY

BY THE

UNITED STATES PUBLIC HEALTH SERVICE

CONTAINING INFORMATION OF THE CURRENT PREVALENCE OF DISEASE, THE OCCURRENCE OF EPIDEMICS, AND RELATED SUBJECTS

VOLUME 34—PART 1

NUMBERS 1-26

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PUBLIC HEALTH REPORTS

VOL. 34 JANUARY 3, 1919 No. 1

EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

The prevalence of influenza as reported to the bureau may be found under the heading "Current State Summaries," page 11 of this issue of the Public Health Reports. These reports are furnished by State health officers and are for the week ended December 28, 1918.

As compared with the preceding week, the number of cases of influenza reported had decreased in Alabama, California, Connecticut, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, New Jersey, North Carolina, Ohio, Oregon, Virginia, and Washington.

Slight increases in the number of cases reported are shown in Maine and Vermont. In New York the disease is said to be still prevalent throughout the State, and considerable recrudescence is reported from Utah, but the type of the disease is said to be less severe than during the height of the epidemic.

The following table shows the number of cases of influenza reported in the zones surrounding military camps in the United States from September 15 to December 28, 1918, inclusive. The cases reported from September 15 to October 26, 1918, are shown by weeks in the Public Health Reports, volume 33, No. 49, December 6, 1918, pages 2153–2154.

Cases of influenza reported in extra-cantonment zones.

State and zone.	Cases reported to Oct. 26, 1918.	Cases reported week ended—								
		Nov. 2.	Nov. 9.	Nov. 16.	Nov. 23.	Nov. 30.	Dec. 7.	Dec. 14.	Dec. 21.	Dec. 28.
Massachusetts:										
Devens	175	13	11	24	6	0	11	56	118	120
Connecticut:										
New London sanitary district	3,139	114	77	66	73	94	74	35	122	.....
New Jersey:										
Dix	217	57	89	2	0	4	0	0	3	17
Merrit	.....	.....	.....	.....	12	25	15	33	22	67
Ohio:										
Sherman	2,042	69	26	38	54	58	52	128	28	.....
Iowa:										
Dodge	1,776	126	208	40	519	934	2,949	827	48	16
Kansas:										
Funston	814	173	75	94	79	235	441	357	183	46
Leavenworth	461	143	95	118	162	400	353	238	101	25
Virginia:										
Humphreys	930	72	21	0	6	19	7	26	31	47
Lee	7,515	305	79	0	2	7	434	529	475	280
Portsmouth and Norfolk County health district	11,304	145	8	7	9	0	131	937	352	4
Tidewater health district	3,847	804	2	0	2	0	2	256	618	52
North Carolina:										
Fayetteville sanitary district	.....	.....	.....	.....	.....	.....	24	80	70	19
Greene	2,061	61	49	52	100	173	573	347	100	33
Polk	.....	.....	284	262	314	294	459	524	316	247
Wilmington sanitary district	.....	.....	.....	0	0	0	3	1	39	66

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Cases of influenza reported in extra-cantonment zones—Continued.

State and zone.	Cases reported to Oct. 26, 1918.	Cases reported week ended—								
		Nov. 2.	Nov. 9.	Nov. 16.	Nov. 23.	Nov. 30.	Dec. 7.	Dec. 14.	Dec. 21.	Dec. 28.
South Carolina:										
Charleston sanitary district	.....	208	172	70	78	178	75	385	85	179
Jackson	7,656	87	6	13	53	35	42	300	102	24
Sevier	3,316	166	3	4	278	117	227	242	214	120
Wadsworth	1,172	234	49	112	144	126	285	304	113	32
Georgia:										
Gas and Flame School	3,506	531	260	233	85	93	184	818	270	88
Gordon	3,149	372	134	124	172	141	122	282	257	86
Hancock	996	281	153	239	290	33	31	61	29	18
Picric acid plant	743	42	41	14	16	14	40	111	94	28
Wheeler	1,990	522	253	257	671	523	529	218	61	27
Florida:										
Johnston	5,436	233	10	0	3	8	10	41	19	25
Kentucky and Indiana:										
Taylor	9,857	1,146	513	454	837	935	1,485	1,520	706	319
Georgia and Tennessee:										
Oglethorpe	3,644	73	26	11	2	38	24	12	138	47
Alabama:										
McClellan	1,586	282	38	229	105	90	124	148	47	15
Sheridan	560	55	1	32	80	99	354	306	84	39
Mississippi:										
Gulfport health district	4,678	753	388	227	113	206	221	270	332	285
Shelby	891	107	50	6	179	35	90	335	196	.....
Arkansas:										
Eberts	1,662	219	44	118	33	75	154	137	134	51
Pike	9,406	324	94	76	95	209	568	249	174	82
Louisiana:										
Beauregard	3,445	253	78	33	8	5	69	253	166	117
Gerstner Field	.....	380	196	174	177	309	917	420	167	63
Oklahoma:										
Doniphan	296	12	4	5	2	8	16	236	49	41
Texas:										
Bowie	1,313	68	32	38	14	36	209	288	57	22
Logan	468	341	1	0	0	.....	26	79	0	10
MacArthur	1,005	283	75	10	5	12	32	42	28	26
Travis	5,781	844	385	124	149	254	1,206	1,264	444	86
Washington:										
Bremerton	533	77	82	46	47	60	0	385	236	9
Lewis	135	72	44	32	12	7	30	12	20	22
Vancouver	642	156	183	47	120	154	249	329	0	0

REPORT OF ANTIVENEREAL CAMPAIGN.

An important health activity is being carried on under the so-called Chamberlain-Kahn Act, which provides for a system of Federal aid for antivenereal work in States meeting certain conditions. All the States in the Union have complied with its provisions by passing the necessary laws except Idaho, Michigan, Missouri, New Mexico, Pennsylvania, Tennessee, Utah, and the District of Columbia. Several of these States have signified their intention of cooperation in the near future.

In conjunction with State boards of health, the Division of Venereal Disease, United States Public Health Service, created by this act, is conducting approximately 125 clinics. The reports from the clinics show increase in number of cases treated and in interest each month, so that additional clinics and facilities are needed. When any clinic proves the advantage of a certain plan of procedure, a note concerning such plan is passed on to other clinics for trial and suggestions. In conjunction with the Red Cross in extra-cantonment zones, the division is now conducting 25 clinics. Social service and follow-up

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[redacted] States must be covered through [redacted] cooperative campaign in which all agencies—National, State, and local—can play an important part.

EXPERIMENTAL MAMMALIAN POLYNEURITIS PRODUCED BY A DEFICIENT DIET.

By CARL VOEGTLIN and G. C. LAKE, Hygienic Laboratory, United States Public Health Service.

Progress in the study of diseases of dietary origin has been greatly aided by animal experimentation. This is true of the group of so-called deficiency diseases, of which beriberi is the best known example, as well as in the other fields of medical research. Thus it can not be questioned that Eijkman's discovery that polyneuritis in fowls could be induced by an exclusive diet of polished rice has very materially contributed to our present conception of the etiology of beriberi and its prevention.

The study of deficiency polyneuritis is also intimately connected with the more recent development of the physiological aspects of nutrition, inasmuch as it has been shown that beriberi is due to a deficiency of the diet in a definite substance (antineuritic vitamine), which is essential for normal nutrition. From this standpoint the study of beriberi in animals will undoubtedly shed some light on the physiological function of the antineuritic vitamine. All we know at the present time regarding this function is that a certain minimal amount of this substance must be present in the diet in order to

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promptly by the disappearance of the symptoms, and the continued administration of these preparations prevents the recurrence of the disease.

(3) *Pathological changes.*—Certain histopathological changes, especially the changes involving the nervous system, are described. Animals showing severe paralysis exhibit no qualitative changes in the reaction of various nerves to electric stimulation.

II. The disease is due to a deficiency of the diet in antineuritic substance, and not to a deficiency in the other essential dietary components (amino acids, fat-soluble vitamine, etc.).

III. Exposure of the beef for three hours to a temperature of 120° C., without the previous addition of alkali, does not completely destroy the antineuritic power of this food. It is, therefore, concluded that the ordinary preparation of meat for human consumption does not lessen its food value in this respect.

IV. The various species of animals show a considerable difference in their susceptibility to polyneuritis, as evidenced by the different length of time which is necessary to induce the disease by the same deficient diet. Cats respond to the deficient diet with the greatest regularity and are, therefore, best adapted for physiological studies of the function of the antineuritic substance.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED DEC. 28.

CAMP BEAUREGARD ZONE, LA.

	Cases.
Alexandria:	
Influenza	47
Measles	7
Mumps	1
Smallpox	1
Pineville:	
Cerebrospinal meningitis	2
Influenza	49
Rural district:	
Influenza	21

CAMP BOWIE ZONE, TEX.

Fort Worth:	
Cerebrospinal meningitis	3
Chancroid	2
Dysentery	2
Gonorrhea	6
Influenza	22
Measles	1
Pneumonia	21
Scabies	1
Syphilis	6
Tuberculosis	2
Typhoid fever	1

BREMERTON ZONE, WASH.

Chicken pox	2
Influenza	9
Measles	3
Tuberculosis, pulmonary	1

CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	
Diphtheria	2
Influenza	179
Tuberculosis	1
Typhoid fever	1

CAMP DEVENS ZONE, MASS.

Influenza:	
Ayer	5
Lancaster	2
Lunenburg	109
Shirley	4

CAMP DEVENS ZONE, MASS.—continued.

	Cases.
Measles:	
Ayer	1
Shirley	1
Pneumonia, lobar:	
Lunenburg	1

CAMP DIX ZONE, N. J.

Influenza:	
New Hanover Township	3
Plumstead Township	14

CAMP DODGE ZONE, IOWA.

Bloomfield Township:	
Influenza	8
Des Moines:	
Diphtheria	6
Influenza	8
Scarlet fever	4
Smallpox	1

CAMP DONIPHAN ZONE, OKLA.

Comanche County:	
Diphtheria	2
Influenza	24
Pneumonia	3
Lawton:	
Gonorrhea	3
Influenza	17
Pneumonia	6
Typhoid fever	4

CAMP EBERTS ZONE, ARK.

Diphtheria:	
Lonoke	1
Influenza:	
Cabot	10
Cabot, R. F. D.	2
Carlisle	2
Carlisle, R. F. D.	4
England	8
Lonoke	1
Lonoke, R. F. D.	12
McRae	1
Ward	5
Ward, R. F. D.	5

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FAYETTEVILLE SANITARY DISTRICT, N. C.

	Cases.
Cumberland County:	
Influenza	11
Fayetteville:	
Chancroid	1
Influenza	8
Mumps	1

CAMP FUNSTON ZONE, KANS.

Chicken pox:	
Manhattan	2
Diphtheria:	
Junction City	2
Manhattan	1
Gonorrhea:	
Junction City	1
Influenza:	
Junction City	12
Manhattan	29
Ogden	2
Randolph	3
Measles:	
Army City	1
Junction City	4
Meningitis carriers:	
Junction City	2
Pneumonia:	
Junction City	1
Manhattan	3

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Columbus:	
Influenza	54
Malaria	2
Measles	1
Pellagra	3
Pneumonia	4
Smallpox	3
Tuberculosis	4
Girard:	
Influenza	13
Pneumonia	1
Smallpox	1
Muscogee County:	
Influenza	17
Pneumonia	1
Phoenix City:	
Influenza	4

GERSTNER FIELD ZONE, LA.

Influenza	63
Pneumonia	5
Smallpox	3
Typhoid fever	1

CAMP GORDON ZONE, GA

Atlanta:	
Cerebrospinal meningitis	1
Gonorrhea	10
Influenza	56
Pneumonia	1
Scarlet fever	4
Septic sore throat	1
Smallpox	15
Syphilis	7
Tuberculosis	1

CAMP GREENE ZONE, N. C.

	Cases.
Charlotte Township:	
Diphtheria	1
Gonorrhea	13
Influenza	33
Smallpox	1
Syphilis	11
Typhoid fever	1

GULFPORT HEALTH DISTRICT, MISS.

Gonorrhea:	
Biloxi	1
Moss Point	2
Influenza:	
Biloxi	126
Cuevas	1
Gulfport	50
Handsboro	1
Mississippi City	6
Moss Point	33
Ocean Springs	1
Pass Christian	12
Scattered	26
Malaria:	
Gulfport	1
Moss Point	3
Mumps:	
Gulfport	1
Pneumonia:	
Biloxi	12
Gulfport	3
Kiln	1
Moss Point	4
Syphilis:	
Moss Point	1
Tuberculosis:	
Gulfport	1

CAMP HANCOCK ZONE, GA.

Augusta:	
Influenza	18
Measles	1
Pneumonia	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Influenza	24
Typhoid fever	1
United States Government clinic:	
Gonorrhea	4
Syphilis	8

CAMP JOSEPH E. JOHNSTON ZONE, FLA.

Chancroid:	
Jacksonville	5
Diphtheria:	
Jacksonville	1
Gonorrhea:	
Jacksonville	26
Influenza:	
Jacksonville	20
Ortega	5
Measles:	
Jacksonville	26
Pellagra:	
Jacksonville	1
Scarlet fever:	
Jacksonville	1

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CAMP JOSEPH E. JOHNSTON ZONE, FLA.—con.

	Cases.
Syphilis:	
Jacksonville	6
Trachoma:	
Fishers Corner	1
Grand Crossing	13
Panama Park	1
Tuberculosis:	
Jacksonville	3

FORT LEAVENWORTH ZONE, KANS.

Leavenworth:	
Diphtheria	1
Gonorrhea	7
Influenza	4
Tuberculosis	1
Leavenworth County:	
Influenza	31

CAMP LEE ZONE, VA.

Petersburg:	
Gonorrhea	1
Influenza	277
Pneumonia	19
Syphilis	1
Tuberculosis	1
Prince George County:	
Influenza	3

CAMP LEWIS ZONE, WASH.

Influenza:	
American Lake	4
Roy	18
Scarlet fever:	
Tillicum	1

CAMP LOGAN ZONE, TEX.

Houston:	
Diphtheria	1
Gonorrhea	2
Influenza	10
Syphilis	6
Tuberculosis	1

CAMP MACARTHUR ZONE, TEX.

Waco:	
Chancroid	1
Diphtheria	1
Gonorrhea	2
Influenza	26
Measles	1
Pneumonia	1
Syphilis	10
Tuberculosis	1

CAMP M'CLELLAN ZONE, ALA.

Anniston:	
Gonorrhea	6
Influenza	5
Measles	1
Syphilis	1
Precinct 15:	
Influenza	10

CAMP MERRIT ZONE, N. J.

Chicken pox:	
Englewood	2
Diphtheria:	
Haworth	1
Tenafly	1

CAMP MERRIT ZONE, N. J.—continued.

	Cases.
Erysipelas:	
Englewood	1
Gonorrhea:	
Englewood	1
Influenza:	
Closer	1
Cresskill	1
Demarrel	1
Englewood	61
Haworth	1
Tenafly	2
Pneumonia:	
Englewood	1
Tenafly	1
Scarlet fever:	
Tenafly	3
Tuberculosis:	
Bergenfield	1
Typhoid fever:	
Englewood	3

FORT OGLETHORPE ZONE, GA. AND TENN.

Chattanooga:	
Diphtheria	2
Gonorrhea	13
Influenza	27
Smallpox	1
Syphilis	11
Eastlake:	
Influenza	6
Typhoid fever	1
North Chattanooga:	
Influenza	14

PENSACOLA SANITARY DISTRICT, FLA.

Pensacola:	
Chicken pox	4
Dengue	1
Influenza	30
Malaria	1
Pneumonia	2
Tuberculosis	1

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	5
Influenza	28
Measles	15
Syphilis	3
Tuberculosis	2

CAMP PIKE ZONE, ARK.

Little Rock:	
Cerebrospinal meningitis	1
Chicken pox	5
Diphtheria	3
Gonorrhea	6
Influenza	66
Measles	1
Mumps	4
Pneumonia	12
Syphilis	5
Tuberculosis	9
North Little Rock:	
Influenza	6
Measles	3
Scarlet fever	1

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CAMP PIKE ZONE, ARK.—continued.

Pleron:	Cases.
German measles	3
Influenza	2
Tuberculosis	1
Scotts:	
Influenza	8
Syphilis	1

CAMP POLK ZONE, N. C.

Durham:	
Cerebrospinal meningitis	1
Chicken pox	1
Influenza	111
Durham County:	
Influenza	73
Smallpox	2
Raleigh:	
Influenza	63
Smallpox	1
Wake County:	
Pneumonia, lobar	4
Smallpox	4
Typhoid fever	1

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Norfolk:	
Gonorrhea	2
Syphilis	1
Portsmouth:	
Influenza	4
Syphilis	1

PORTSMOUTH-KITTERY SANITARY DISTRICT, N. H. AND ME.

Chicken pox:	
Portsmouth	2
Gonorrhea:	
Portsmouth	1
Influenza:	
Greenland	77
Hampton	6
Portsmouth	143
Rye	3
York	11
Pneumonia:	
Greenland	10
Syphilis:	
Portsmouth	1
Tuberculosis, pulmonary:	
Portsmouth	1

CAMP SEVIER ZONE, S. C.

Greenville:	
Scarlet fever	1
Smallpox	2
Whooping cough	6
Greenville and vicinity:	
Influenza	120
Pneumonia	10

CAMP SHERIDAN ZONE, ALA.

Montgomery:	
Influenza	39
Pneumonia, broncho	1
Scarlet fever	1
United States Government clinic:	
Chancroid	3
Gonorrhea	17
Syphilis	6

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Chicken pox:	Cases.
Louisville	1
Diphtheria:	
Louisville	5
Gonorrhea:	
United States Government clinic	20
Venereal clinic, county jail	19
Union Gospel Mission	6
Influenza:	
Clark County	72
Jefferson County	60
Jeffersonville	11
Louisville	114
New Albany	72
Measles:	
Louisville	4
Pneumonia, lobar:	
Jefferson County	1
Louisville	4
Scarlet fever:	
Louisville	1
Syphilis:	
Louisville	1
United States Government clinic	8
Venereal clinic, county jail	3
Union Gospel Mission	4
Tuberculosis, pulmonary:	
Louisville	9

TIDEWATER HEALTH DISTRICT, VA.

Hampton:	
Gonorrhea	1
Newport News:	
Chicken pox	2
Diphtheria	2
Gonorrhea	2
Influenza	528
Measles	2
Pneumonia, lobar	1
Tuberculosis	1
Whooping cough	3
Phoebus:	
Gonorrhea	2
Measles	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chancroid	1
Gonorrhea	16
Influenza	85
Mumps	1
Pneumonia	10
Syphilis	6
Tuberculosis	1

CAMP UPTON ZONE, N. Y.

Gonorrhea:	
Brook Haven	1
Ophthalmia neonatorum:	
Patchogue	1
Pneumonia:	
Brook Haven	3
Riverhead	9

VANCOUVER ZONE, WASH.

Chicken pox	5
Scarlet fever	1
Smallpox	1
Tuberculosis, pulmonary	5

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Cantonments	368.18	Annual death rate per 1,000 (disease only):	
Departmental and other troops	375.46	All troops	13.73
Noneffective rate per 1,000 on day of report:		Divisional camps	11.03
All troops	40.47	Cantonments	8.76
Divisional camps	42.63	Departmental and other troops	21.53

Cases of special diseases reported during the week ended Dec. 20, 1918.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Deaths.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
Beauregard	7	3	1	13	0	.....	45	1	....	1	1,473.95	43.34
Bowie	23	....	1	248	13	11	....	1	....	0	2,078.36	30.84
Cody	....	....	....	1	0	5	....	....	6	7	666.93	133.46
Forrest	2	....	....	2	0	10	39	....	....	0	1,134.08	47.92
Fremont	2	....	....	14	3	.....	1	....	....	0	756.36	46.75
Greene	9	....	..	32	0	10	10	....	1	1	398.32	25.31
Greenleaf	2	1	1	4	0	5	2	....	....	4	479.12	32.96
Hancock	27	....	....	29	13	4	11	3	7	11	568.56	50.81
Kearny	9	....	....	23	2	64	....	....	....	5	640.27	21.92
Logan	9	....	....	13	1	41	4	....	....	1	645.36	38.23
MacArthur	3	....	....	14	0	7	1	....	....	1	917.64	33.68
McClellan	28	....	....	41	0	23	2	....	2	6	924.07	47.83
Sevier	6	....	1	7	2	16	2	....	1	4	840.66	46.58
Shelby	9	....	....	30	18	26	2	....	....	1	1,104.61	50.20
Sheridan	4	....	....	8	0	.....	6	....	....	1	856.63	43.29
Wadsworth	9	....	....	12	0	.....	5	....	....	4	248.23	39.50
Wheeler	8	....	....	16	0	.....	13	....	....	3	1,602.19	134.83
Custer	19	1	....	27	12	.....	2	....	2	2	695.87	17.46
Devens	30	....	....	21	13	45	5	....	....	4	977.77	32.86
Dix	6	....	1	24	0	19	1	....	....	0	519.99	46.93
Dodge	17	....	....	41	7	48	11	....	7	7	1,110.35	54.76
Eustis	50	....	....	8	0	38	3	1	....	4	262.37	11.20
Funston	34	....	....	23	0	16	18	1	24	9	1,212.44	44.57
Gordon	12	....	....	21	0	24	1	....	....	2	962.26	46.24
Grant	8	....	....	18	0	59	4	1	....	2	797.84	25.16
Humphreys	22	1	1	12	0	38	12	1	....	8	815.81	30.38
Jackson	14	....	....	23	0	.....	26	....	....	6	552.63	32.17

[1] Including Porto Rico.

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Cases of special diseases reported during the week ended Dec. 20, 1918—Continued.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Deaths.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
J. F. Johnston	11	....	2	10	0	.....	30	....	....	3	683.16	27.33
Las Casas	11	....	40	1	0	47	....	....	....	3	820.63	34.14
Lee	8	....	....	19	4	152	44	1	....	4	832.82	42.97
Lewis	108	1	....	32	5	42	4	....	1	5	1,845.85	70.25
Meade	10	....	....	39	3	23	26	3	....	3	908.03	26.80
Pike	13	....	....	16	4	36	5	1	1	7	1,406.08	48.02
Sherman	2	....	....	13	0	16	10	....	1	2	591.69	43.31
Taylor	27	....	....	9	3	20	8	....	16	11	747.84	42.44
Travis	51	....	....	17	3	173	17	1	....	8	2,261.31	70.65
Upton	9	....	....	13	0	25	....	....	....	6	680.43	37.03
Northeastern Department	2	....	....	8	2	21	1	1	....	2	815.63	36.22
Eastern Department	11	....	....	23	11	65	....	....	1	4	642.12	22.03
Southeastern Department	1	....	2	23	8	9	5	....	....	0	1,133.45	36.81
Southern Department	25	1	....	76	10	128	10	....	....	20	1,012.40	44.08
Central Department	10	....	....	5	0	40	3	....	....	6	1,427.87	30.10
Western Department	4	....	....	5	0	71	2	6	....	6	617.36	20.92
Aviation camps	81	2	1	85	0	198	12	....	4	68	832.20	26.46
Ports of embarkation:												
Hoboken	12	1	1	5	2	168	9	....	6	7	2,002.15	197.71
Newport News	10	....	....	206	3	39	42	1	....	3	1,928.01	77.03
Alcatraz, disciplinary barracks	....	....	....	.....	.....	.....	.....	....	....	0	1,585.36	3.04
Leavenworth, disciplinary barracks	....	....	....	1	.....	.....	.....	....	....	2	1,267.31	38.73
Jefferson Barracks	7	....	....	7	4	18	1	....	....	1	3,366.33	115.76
Columbus Barracks	4	....	....	11	1	.....	.....	1	....	0	2,742.73	83.96
Fort Logan	....	....	....	1	0	.....	.....	....	1	0	973.94	47.23
Fort McDowell	....	....	....	2	1	.....	.....	....	....	0	684.96	45.00
Fort Sill	15	....	....	20	20	59	3	....	....	6	523.11	25.68
Fort Slocum	....	....	....	2	0	1	....	....	....	0	389.75	31.85
Fort Thomas	....	....	....	2	2	.....	.....	....	....	0	656.27	43.80
West Point	1	....	....	1	....	.....	.....	....	....	0	952.18	21.36
Arsenals	4	....	....	21	3	23	5	....	....	2	805.69	32.90
Miscellaneous small stations	....	....	....	1	0	7	....	....	....	0	391.53	9.68
Students' Army Training Corps	8	1	....	13	0	67	.....	1	....	6	1,250.77	28.50
General hospitals	....	....	....	.....	.....	.....	.....	....	....	44	.....	.....
Total	814	12	52	1,412	173	1,957	463	25	80	323	899.78	40.47

Annual rate per 1,000 for special diseases.

Disease.	All troops in United States.[1]	Departmental and other troops.[1]	Divisional camps.[1]	Cantonments.[1]	Expeditionary forces.[2]
Pneumonia	37.03	24.85	38.49	45.99	26.55
Dysentery	.54	.63	.98	.29	4.75
Malaria	2.36	.50	.98	4.38	.22
Venereal	64.23	66.01	124.20	38.52	30.05
Paratyphoid	.00	.00	.00	.00	.31
Typhoid	.00	.00	.00	.00	.94
Measles	21.06	11.85	35.05	22.60	5.81
Meningitis	1.13	1.27	1.22	.99	1.91
Scarlet fever	3.63	1.52	3.92	5.17	1.37
Influenza	80.03	116.49	54.42	81.73	.....

[1] Week ended Dec. 20, 1918. [2] Week ended Dec. 12, 1918.

Annual death rate (disease only), all troops in United States and American Expeditionary Forces, France, for the week ended Dec. 12, 1918, 12.31.

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CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended December 28, 1918.

Alabama.—Malaria 8, smallpox 4, scarlet fever 7, diphtheria 5, cerebrospinal meningitis 1, infantile paralysis 1, influenza 1,057.

Arkansas.—Influenza: Bradley 64, Morrillton—vicinity—(delayed, 60) 100, Texarkana—vicinity—(delayed, 103) 33, Stuttgart (delayed, 26) 37, Harrison (delayed, 111) 52, Hot Springs—vicinity—29, Hempstead 27, Van Buren 27, Forest City 24, Rogers 20, Hartford 20, Pine Bluff 18, Ouachita 18, Junction City 17, Camden 16, Izard 13, Faulkner 13 cases 1 death, Siloam Springs 12 cases 1 death, Fayetteville (delayed, 18) 11, Stamps 11, St. Francis 11 (also 41 others). White: Smallpox 1, trachoma 1, tuberculosis 1. Pope: Diphtheria 1, measles 1, scarlet fever 1, tuberculosis 1. Bradley: Malaria 8, measles 1, whooping cough 4. Madison: Tuberculosis 4, whooping cough 12. Ouachita: Malaria 1, trachoma 1. Fayetteville, Diphtheria 1. Garland: Tuberculosis 1. Stephens: Malaria 4. Pine Bluff: Diphtheria 1. Drew: Tuberculosis 4. Perry: Malaria 2. Izard: Measles 1. Hartford: Typhoid fever 1. Morrillton: Diphtheria 1. St. Francis: Smallpox 2.

California.—Prevalence of influenza considerably diminished during week, total cases for State being 5,493. Total cases of influenza to date, 225,000. The disease seems to be more prevalent in Fresno and Kings Counties than in other sections. Other communicable diseases are not unusually prevalent.

Connecticut.—Cerebrospinal meningitis, New Haven 1; trachoma, New Haven 1; influenza, for State, 936 cases.

Illinois.—Diphtheria 118, of which in Chicago 102; scarlet fever 29, of which in Chicago 20; smallpox 26, of which in Elgin 17; meningitis, 1 each in Peoria and East Moline; poliomyelitis, Meredosia Precinct, Morgan County, 1; gonorrhea, 1 each in Elgin and Mason City, Waukegan 3, East Moline 16, Belleville 8, Chicago 26; syphilis, Chicago 15; influenza, 5,435.

Indiana.—Influenza, 991 cases; syphilis, 4; gonorrhea, 14. Diphtheria: La Porte County 8, Fulton 2, Marshall 6, Rush 1, Howard 4, Randolph 1, Grant 1, Shelby 1, Wabash 1, DeKalb 1, Elkhart 1. Smallpox: Elkhart 2. Scarlet fever: Dearborn 1, Wells 1. Typhoid fever: Tipton 1, Randolph 1.

Iowa.—Influenza, 2,164 cases reported. Diphtheria: Cedar Rapids 1, Cincinnati 1, Des Moines 6. Gonorrhea: Council Bluffs 3, Dubuque 4, Fort Dodge 2, Hazleton 1, Iowa City 6. Scarlet fever: Burlington 2, Cedar Rapids 1, Cincinnati 1, Des Moines 7. Smallpox: Cedar Rapids 3, Council Bluffs 1, Des Moines 1, Storm Lake 1, Turin 3. Syphilis: Council Bluffs 1. In rural districts of the following counties—Diphtheria: Crawford 2, Mills 1, Woodbury 1. Gonorrhea,

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New Jersey.—Influenza, 3,439 cases; pneumonia 333 cases. No unusual prevalence of other communicable diseases.

New York.—Outside of New York City: Diphtheria 160; scarlet fever 107; typhoid fever 19; whooping cough 56; smallpox 2; pneumonia, Buffalo, 297. Influenza recrudescence in Schenectady, Victor, Waterville, Amity; disease still prevalent throughout State. Voluntary reports: Syphilis 97; gonorrhea 17.

North Carolina.—Total for State: Whooping cough 28; measles 8; diphtheria 22; scarlet fever 14; septic sore throat 3; smallpox 38; chicken pox 16; typhoid fever 17; meningitis 7; ophthalmia neonatorum 1; bacillary dysentery 1; trachoma 1; broncho-pneumonia 66; lobar pneumonia 18. Counties reporting new cases of influenza: Bertie 26, Buncombe 200, Clay 15, Cleveland 175, Davidson 244, Durham 72; Franklin, few; Johnston 60, Montgomery 34, New Hanover 6, Pitt 88, Randolph 10, Rockingham 46. Cities reporting new cases of influenza: Charlotte 32, Durham 111, Raleigh 63, Wilmington 57, Winston-Salem 75.

Ohio.—Influenza rapidly diminishing.

Oregon.—Influenza: Portland 501 cases, 38 deaths; Clackamas County 48; Columbia 6; Grant 2 cases and 1 death; Hood River 27;

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Josephine 13; Lane 2; Lincoln 14; Linn 54; Marion 42; Multnomah 10; Union 13 cases and 1 death; Wasco 27; Washington 30; Gilliam 5.

Utah.—Considerable recrudescence of influenza in Salt Lake City, Ogden, and other localities. Disease seems less severe.

Vermont.—Influenza shows increase in cases and area; 53 towns report 1,151 cases. No other unusual occurrence.

Virginia.—Influenza 412 cases; smallpox, Isle of Wight County, 1 case.

Washington.—No unusual outbreak of disease in State; influenza situation slowly improving.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.		Cases.
Camp Beauregard zone, La	2	Camp Pike zone, Ark	1
Camp Bowie zone, Tex	3	Camp Polk zone, N. C	1
Camp Gordon zone, Ga	1	Wilmington sanitary district, N. C	1

State Reports for November, 1918.

Place.	New cases reported.	Place.	New cases reported.
District of Columbia	4	Maryland—Continued.	
		Baltimore	10
Illinois:		Total	14
Cook County—			
Chicago	1	Mississippi:	
Grundy County—		Adams County	1
Coal City	1	Bolivar County	2
Lake County—		Jasper County	1
Cuba Township	1		
Winnebago County	1	Total	4
Total	4	North Carolina:	
		Forsyth County	1
Maine:		Mecklenburg County	1
Cumberland County—		Wayne County	1
Bridgton (Town)	1		
Penobscot County—		Total	3
Bangor	1		
		Oregon:	
Total	2	Portland	3
		Rhode Island:	
Maryland:		Providence	2
Anne Arundel County	2	South Carolina:	
Baltimore County—		Spartanburg	1
Raspeburg	1		
Pimlico	1		

City Reports for Week Ended Dec. 14, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1		Nashville, Tenn	3	1
Amarillo, Tex	1		Newton, Mass	1	
Baltimore, Md	1	1	New York, N. Y	6	4
Bedford, Ind	2	2	Philadelphia, Pa	1	
Biddeford, Me	1	1	Piqua, Ohio		1
Boston, Mass		1	Racine, Wis		3
Chicago, Ill	2	1	St. Louis, Mo	2	
Cincinnati, Ohio	1		Salem, Mass	1	
Dallas, Tex	1		San Antonio, Tex	1	1
Detroit, Mich	2		Sandusky, Ohio	1	
Fall River, Mass	1		San Francisco, Cal	1	1
Fargo, N. Dak		1	Spartanburg, S. C	1	
Milwaukee, Wis	4	4	Westfield, Mass	1	

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CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.		Cases.
Camp Bowie zone, Tex	2	Camp MacArthur zone, Tex	1
Fayetteville sanitary district, N. C	1	Camp Sheridan zone, Ala	3
Camp Joseph E. Johnston zone, Fla	5	Camp Travis zone, Tex	1

DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.		Cases.
Charleston sanitary district, S. C	2	Camp Logan zone, Tex	1
Camp Dodge zone, Iowa	6	Camp MacArthur zone, Tex	1
Camp Doniphan zone, Okla	2	Camp Merrit zone, N. J	2
Camp Eberts zone, Ark	1	Fort Oglethorpe zone, Ga. and Tenn	2
Camp Funston zone, Kans	3	Camp Pike zone, Ark	3
Camp Greene zone, N. C	1	Camp Zachary Taylor zone, Ky. and Ind	5
Camp Joseph E. Johnston zone, Fla	1	Tidewater health district, Va	2
Fort Leavenworth zone, Kans	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 24.

ERYSIPELAS.

City Reports for Week Ended Dec. 14, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alameda, Cal	1	...	Morgantown, W. Va	1	...
Buffalo, N. Y	1	...	Nashville, Tenn	1	...
Chicago, Ill	5	1	New York, N. Y	...	1
Cincinnati, Ohio	1	1	Omaha, Nebr	1	...
Cleveland, Ohio	5	...	Passaic, N. J	1	...
Columbus, Ohio	...	1	Philadelphia, Pa	...	1
Jackson, Mich	1	...	Portland, Oreg	1	...
Los Angeles, Cal	4	...	St. Louis, Mo	3	...
Milwaukee, Wis	1	1			

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.		Cases.
Camp Bowie zone, Tex	6	Fort Oglethorpe zone, Ga. and Tenn	13
Camp Doniphan zone, Okla	3	Picric Acid Plant zone, Ga	5
Camp Funston zone, Kans	1	Camp Pike zone, Ark	6
Camp Gordon zone, Ga	10	Portsmouth and Norfolk County health district, Va	2
Camp Greene zone, N. C	13	Portsmouth-Kittery sanitary district, N. H. and Me	1
Gulfport health district, Miss	3	Camp Sheridan zone, Ala	17
Camp Jackson zone, S. C	4	Camp Zachary Taylor zone, Ky. and Ind	36
Camp Joseph E. Johnston zone, Fla	26	Tidewater health district, Va	5
Fort Leavenworth zone, Kans	7	Camp Travis zone, Tex	16
Camp Lee zone, Va	1	Camp Upton zone, N. Y	1
Camp Logan zone, Tex	2	Wilmington sanitary district, N. C	1
Camp MacArthur zone, Tex	2		
Camp McClellan zone, Ala	6		
Camp Merrit zone, N. J	1		

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INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.
Camp Beauregard zone, La	117
Camp Bowie zone, Tex	22
Bremerton zone, Wash	9
Charleston sanitary district, S. C	179
Camp Devens zone, Mass	120
Camp Dix zone, N. J	17
Camp Dodge zone, Iowa	16
Camp Doniphan zone, Okla	41
Camp Eberle zone, Ark	51
Fayetteville sanitary district, N. C	19
Camp Funston zone, Kans	46
Gas and Flame School zone, Ga. and Ala	88
Gerstner Field zone, La	63
Camp Gordon zone, Ga	56
Camp Greene zone, N. C	33
Gulfport health district, Miss	265
Camp Hancock zone, Ga	18
Camp Jackson zone, S. C	24
Camp Joseph E. Johnston zone, Fla	25
Fort Leavenworth zone, Kans	35
Camp Lee zone, Va	280
Camp Lewis zone, Wash	22
Camp Logan zone, Tex	10
Camp MacArthur zone, Tex	26
Camp McClellan zone, Ala	15
Camp Merrit zone, N. J	67
Fort Oglethorpe zone, Ga. and Tenn	47
Pensacola sanitary district, Fla	39
Picric Acid Plant zone, Ga	28
Camp Pike zone, Ark	82
Camp Polk zone, N. C	247
Portsmouth and Norfolk County health district, Va	4
Portsmouth-Kittery sanitary district, N. H. and Me	240
Camp Sevier zone, S. C	120
Camp Sheridan zone, Ala	39
Camp Zachary Taylor zone, Ky. and Ind	319
Tidewater health district, Va	52
Camp Travis zone, Tex	85
Camp Wadsworth zone, S. C	32
Camp Wheeler zone, Ga	27
Wilmington sanitary district, N. C	66

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.
Gas and Flame School zone, Ga. and Ala	2
Gulfport health district, Miss	4
Pensacola sanitary district, Fla	1

State Reports for November, 1918.

Place.	New cases reported.
Maryland:	
Caroline County—	
Federalsburg	2
Charles County—	
Waldorf, R. D	1
Prince Georges County—	
Malcolm, R. D	1
Somerset County—	
Westover	1
Washington County—	
Williamsport	1
Total	6
Mississippi:	
Adams County	10
Alcorn County	31
Amite County	47
Attala County	34
Benton County	16
Bolivar County	329
Calhoun County	8
Carroll County	30
Choctaw County	33
Claiborne County	35
Clarke County	40
Coahoma County	197
Copiah County	71
Covington County	44
De Soto County	36
Forrest County	3
Franklin County	30
George County	14
Grenada County	4
Hancock County	50
Harrison County	39
Hinds County	130
Holmes County	172
Itawamba County	26
Jasper County	76
Jefferson County	37
Jones County	32
Kemper County	40
Lafayette County	26
Lamar County	12
Lauderdale County	96
Lawrence County	48
Leake County	27
Lee County	49
Leflore County	279
Lincoln County	29
Lowndes County	15
Madison County	35
Marion County	63
Marshall County	21
Monroe County	140
Montgomery County	55
Neshoba County	40
Newton County	11
Noxubee County	15
Oktibbeha County	15

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MALARIA—Continued.

State Reports for November, 1918—Continued.

Place.	New cases reported.	Place.	New cases reported.
Mississippi—Continued.		Mississippi—Continued.	
Panola County	70	Union County	14
Perry County	47	Walthall County	10
Pike County	38	Warren County	127
Pontotoc County	51	Washington County	78
Prentiss County	41	Wayne County	18
Quitman County	48	Webster County	19
Rankin County	22	Winston County	76
Sharkey County	84	Yalobusha County	8
Simpson County	22	Yazoo County	243
Smith County	10		
Stone County	19	Total	4,265
Sunflower County	380		
Tallahatchie County	63	South Carolina:	
Tate County	50	Beaufort	2
Tippah County	28	Spartanburg	2
Tishomingo County	21		
Tunica County	109	Total	4

City Reports for Week Ended Dec. 14, 1918.

During the week ended December 14, 1918, there were reported seven cases of malaria at Meridian, Miss., and one death at Los Angeles, Cal.

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.		Cases.
Camp Beauregard zone, La	7	Camp MacArthur zone, Tex	1
Camp Bowie zone, Tex	1	Camp McClellan zone, Ala	1
Bremerton zone, Wash	3	Picric Acid Plant zone, Ga	15
Camp Devens zone, Mass	2	Camp Pike zone, Ark	4
Camp Funston zone, Kans	5	Camp Zachary Taylor zone, Ky. and Ind	4
Gas and Flame School zone, Ga. and Ala	1	Tidewater health district, Va	3
Camp Hancock zone, Ga	1	Camp Wadsworth zone, S. C	3
Camp Joseph E. Johnston zone, Fla	26		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 24.

PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.		Cases.
Gas and Flame School zone, Ga. and Ala	3	Wilmington sanitary district, N. C	1
Camp Joseph E. Johnston zone, Fla	1		

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PELLAGRA—Continued.

State Reports for November, 1918.

Place.	New cases reported.
District of Columbia	1
Maine:	
Kennebec County—	
Waterville	1
Mississippi:	
Adams County	1
Amite County	1
Attala County	1
Bolivar County	26
Calhoun County	1
Claiborne County	3
Clay County	3
Coahoma County	23
Copiah County	7
De Soto County	7
Forrest County	3
George County	3
Hinds County	17
Holmes County	7
Jasper County	3
Jefferson County	1
Jones County	1
Kemper County	6
Lawrence County	5
Lee County	15
Leflore County	4
Lincoln County	4
Madison County	5
Marion County	4
Marshall County	5
Monroe County	4
Montgomery County	3
Neshoba County	10
Noxubee County	3
Panola County	2
Perry County	3
Pike County	4
Prentiss County	6
Quitman County	3
Rankin County	1
Scott County	3
Sharkey County	9
Simpson County	1
Smith County	5
Sunflower County	9
Tallahatchie County	10
Tippah County	4
Tishomingo County	6
Tunica County	9
Union County	1
Warren County	2
Washington County	5
Webster County	4
Yalobusha County	1
Yazoo County	13
Total	277
South Carolina:	
Greenville County	1
Laurens County	1
Spartanburg County	1
Total	3

City Reports for Week Ended Dec. 14, 1918.

Place.	Cases.	Deaths.
Austin, Tex	1	
Birmingham, Ala		1
Charleston, S. C		1
Chicago, Ill		1
Columbus, Ga		1
Detroit, Mich		1
Memphis, Tenn	1	
Montgomery, Ala		1
Raleigh, N. C		1
San Antonio, Tex	1	

PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.
Camp Bowie zone, Tex	21
Camp Devens zone, Mass	1
Camp Doniphan zone, Okla	9
Camp Funston zone, Kans	4
Gas and Flame School zone, Ga. and Ala	6
Gerstner Field zone, La	5
Camp Gordon zone, Ga	1
Gulfport health district, Miss	20
Camp Hancock zone, Ga	1
Camp Lee zone, Va	19
Camp MacArthur zone, Tex	1
Camp Merrit zone, N. J	2
Pensacola sanitary district, Fla	2
Camp Pike zone, Ark	12
Camp Polk zone, N. C	4
Portsmouth-Kittery sanitary district, N. H. and Me	10
Camp Sevier zone, S. C	10
Camp Sheridan zone, Ala	1
Camp Zachary Taylor zone, Ky. and Ind	5
Tidewater health district, Va	1
Camp Travis zone, Tex	10
Camp Upton zone, N. Y	12
Wilmington sanitary district, N. C	12

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PNEUMONIA—Continued.

City Reports for Week Ended Dec. 14, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Adrian, Mich	11	5	Los Angeles, Cal	29	8
Amarillo, Tex	30	13	Lottisville, Ky	5	3
Anniston, Ala	11	.....	Lynn, Mass	2	2
Atlantic City, N. J	16	11	Manchester, N. H	2	2
Auburn, N. Y	3	3	Manitowoc, Wis	8	2
Baltimore, Md	20	24	Meridian, Miss	2	.....
Battle Creek, Mich	4	.....	Montclair, N. J	11	6
Belleville, N. J	1	.....	Montgomery, Ala	9	9
Binghamton, N. Y	7	1	Morgantown, W. Va	8	.....
Bloomfield, N. J	7	3	Morristown, N. J	5	4
Boston, Mass	57	30	Mount Vernon, N. Y	1	2
Bridgeport, Conn	1	14	New Bedford, Mass	3	5
Brookline, Mass	1	1	New London, Conn	1	3
Brunswick, Ga	6	1	Newport, R. I	27	1
Cambridge, Mass	1	3	Newton, Mass	1	1
Charleston, W. Va	24	6	New York, N. Y	280	317
Chelsea, Mass	3	.....	Niagara Falls, N. Y	4	4
Chicago, Ill	672	158	Norfolk, Va	5	3
Chicopee, Mass	4	1	Northampton, Mass	3	1
Cleveland, Ohio	98	74	North Tonawanda, N. Y	3	3
Columbia, S. C	10	.....	Norwood, Ohio	7	5
Columbus, Ga	24	9	Oakland, Cal	1	2
Cranston, R. I	5	5	Oak Park, Ill	6	6
Dayton, Ohio	9	9	Pasadena, Cal	2	.....
Detroit, Mich	52	38	Passaic, N. J	13	2
Duluth, Minn	1	2	Philadelphia, Pa	24	47
Durham, N. C	1	2	Piqua, Ohio	2	.....
East Orange, N. J	15	5	Pontiac, Mich	17	1
Elmira, N. Y	14	7	Port Chester, N. Y	2	2
Englewood, N. J	1	.....	Poughkeepsie, N. Y	2	.....
Fall River, Mass	3	1	Quincy, Ill	9	11
Findlay, Ohio	2	2	Riverside, Cal	4	8
Fort Worth, Tex	37	17	Rome, N. Y	8	.....
Framingham, Mass	3	3	Rutland, Vt	2	.....
Fremont, Ohio	2	6	Saginaw, Mich	2	23
Gardner, Mass	1	1	Salem, Mass	5	3
Grand Rapids, Mich	24	21	San Antonio, Tex	36	31
Hackensack, N. J	5	4	San Diego, Cal	2	3
Harrison, N. J	2	.....	Sandusky, Ohio	18	10
Helena, Ark	4	4	San Francisco, Cal	9	9
Henderson, Ky	11	5	Sault Ste. Marie, Mich	4	.....
Highland Park, Mich	30	16	Schenectady, N. Y	3	3
Hornell, N. Y	10	.....	Sioux Falls, S. Dak	14	8
Independence, Mo	13	12	Somerville, Mass	5	2
Ithaca, N. Y	1	1	Spartanburg, S. C	2	1
Jackson, Mich	14	4	Springfield, Mass	40	22
Jamestown, N. Y	4	.....	Toledo, Ohio	9	11
Jersey City, N. J	1	.....	Troy, N. Y	1	3
Kalamazoo, Mich	38	21	Waco, Tex	4	4
Kansas City, Kans	8	.....	Watertown, Mass	3	2
Kansas City, Mo	78	73	Wichita, Kans	6	2
Kearny, N. J	5	1	Wilmington, Del	6	6
Lackawanna, N. Y	4	6	Worcester, Mass	17	8
Lincoln, Nebr	1	7	Yonkers, N. Y	9	9
Little Rock, Ark	21	7			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for November, 1918.

Place.	New cases reported.	Place.	New cases reported.
Illinois:		Mississippi:	
Sangamon County—		Holmes County	2
Springfield	1	Kemper County	1
Iowa:		Tallahatchie County	8
Monona County	1	Total	11
Maryland:		North Carolina:	
Anne Arundel County—		Wake County	1
Pasadena, R. D	2	Oregon:	
Montgomery County		Portland	1
Bordett	1		
Total	3		

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POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

City Reports for Week Ended Dec. 14, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Kansas City, Mo.	.....	1	New York, N. Y.	1	.....
Kenosha, Wis.	.....	1	Pittsburgh, Pa.	1	.....
Manchester, N. H.	1	.....	San Francisco, Cal.	1	.....
Milwaukee, Wis.	1	.....			

RABIES IN ANIMALS.

City Report for Week Ended Dec. 14, 1918.

Place.	Cases.	Place.	Cases.
Ansonia, Conn.	2	Oakland, Cal.	1
Kansas City, Mo.	5	St. Paul, Minn.	1
Louisville, Ky.	1	San Antonio, Tex.	1
Memphis, Tenn.	2		

RABIES IN MAN.

City Report for Week Ended Dec. 14, 1918.

During the week ended December 14, 1918, there was one death from rabies reported at Charleston, S. C.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.		Cases.
Camp Dodge zone, Iowa.	4	Camp Pike zone, Ark.	1
Camp Gordon zone, Ga.	4	Camp Sevier zone, S. C.	1
Camp Joseph E. Johnston zone, Fla.	1	Camp Sheridan zone, Ala.	1
Camp Lewis zone, Wash.	1	Camp Zachary Taylor zone, Ky. and Ind.	1
Camp Merrit zone, N. J.	3	Vancouver zone, Wash.	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 24.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.		Cases.
Camp Beauregard zone, La.	1	Fort Oglethorpe zone, Ga. and Tenn.	1
Camp Dodge zone, Iowa.	1	Camp Polk zone, N. C.	7
Gas and Flame School zone, Ga. and Ala.	4	Camp Sevier zone, S. C.	2
Gerstner Field zone, La.	3	Vancouver zone, Wash.	1
Camp Gordon zone, Ga.	15	Wilmington sanitary district, N. C.	1
Camp Greene zone, N. C.	1		

New Jersey—Palmyra.

On December 27, 1918, an outbreak of smallpox of mild type was reported at Palmyra, N. J.

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SMALLPOX—Continued.

State Reports for November, 1918—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
District of Columbia	4				4	
Maryland:						
Washington County—						
Rockdale, R. D	1				1	
Clearspring	1				1	
Hagerstown	13				13	
Total	15				15	

State Reports for November, 1918.

Place.	Cases.	Deaths.
Illinois:		
Adams County—		
Quincy	3	
Riverside Township	1	
Cass County—		
Beardstown	1	
Christian County—		
Stonington	3	
Cumberland County		
Crooked Creek Township	1	
De Witt County		
Farmer City	1	
Tunbridge Township	1	
Marion County—		
Salem	1	
Morgan County—		
Chapin	1	
Jacksonville	2	
Jacksonville Precinct	8	
Sulphur Springs	1	
Moultrie County		
Lowe Township	4	
Ogle County		
Rochelle	1	
Peoria County—		
Peoria	3	
Peoria Heights	1	
Rock Island County—		
East Moline	1	
Shelby County—		
Richland Township	1	
Tazewell County		
Pekin	1	
Total	36	
Iowa:		
Boone County	2	
Buena Vista County	1	
Cass County	1	
Cerro Gordo County	7	
Cherokee County	1	
Des Moines County	25	
Dubuque County	1	
Floyd County	2	
Grundy County	2	
Jasper County	4	
Linn County	1	
Marshall County	7	
Monona County	2	
Polk County	21	1
Pottawattamie County	14	
Shelby County	7	
Wapello County	1	
Webster County	10	
Woodbury County	1	
Total	110	1
Maine:		
Androscoggin County—		
Lewiston	2	
Aroostook County—		
Island Falls (town)	4	
Township 10, range 3	1	
Total	7	
Mississippi:		
Alcorn County	1	
Bolivar County	5	
Clay County	10	
Coahoma County	1	
Jefferson County	3	
Jones County	2	
Lauderdale County	1	
Leflore County	9	
Lowndes County	1	
Monroe County	6	
Neshoba County	10	
Scott County	17	
Sharkey County	2	
Sunflower County	34	
Tallahatchie County	10	
Tunica County	2	
Total	114	
North Carolina:		
Bertie County	2	
Burke County	1	
Calarrus County	8	
Chowan County	1	
Forsyth County	8	
Gaston County	1	
Guilford County	1	
Mecklenburg County	3	
Perquimans County	4	
Richmond County	1	
Robeson County	4	
Rockingham County	5	
Total	39	

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SMALLPOX—Continued.

State Reports for November, 1918—Continued.

Place.	Cases.	Deaths.
North Dakota:		
Cass County	1	
Grand Forks County	5	
Morton County	1	
Ramsey County	1	
Total	8	
Oregon:		
Columbia County	1	
Coos County	1	
Gilliam County	13	
Hood River County	19	
Klamath County	10	
Umatilla County	1	
Portland	14	
Total	59	
South Carolina:		
Chesterfield County	9	
Colleton County	1	
Greenville County	7	
Laurens County	1	
Pickens County	2	
Spartanburg County	12	
Total	32	
Wyoming:		
Sweetwater County	6	
Laramie County	6	
Uinta County	1	
Total	13	

City Reports for Week Ended Dec. 14, 1918.

Place.	Cases.	Deaths.
Adrian, Mich	17	
Beaumont, Tex	1	1
Burlington, Iowa	4	
Chicago, Ill	2	
Cleveland, Ohio	8	
Columbus, Ga	1	
Council Bluffs, Iowa	4	
Dallas, Tex	1	
Denver, Colo	11	
Des Moines, Iowa	2	
Elgin, Ill	10	
Jackson, Mich	1	
Kansas City, Kans	1	
Kansas City, Mo	2	
Laurel, Miss	1	1
Lincoln, Nebr	1	
Long Beach, Cal	3	
Marshalltown, Iowa	7	
Milwaukee, Wis	1	
Minneapolis, Minn	9	
Muncie, Ind	1	
Muskegon, Mich	2	
New Orleans, La	2	
Norfolk, Va	1	
Oklahoma City, Okla	3	
Omaha, Nebr	6	
Oshkosh, Wis	6	
Peoria, Ill	6	
Portland, Oreg	2	
Saginaw, Mich	1	
St. Joseph, Mo	4	
St. Louis, Mo	1	
St. Paul, Minn	18	
Salt Lake City, Utah	1	
San Antonio, Tex	1	
Sioux Falls, S. Dak	1	
Steubenville, Ohio	4	
Toledo, Ohio	2	
Wichita, Kans	3	
Winston-Salem, N. C	2	
Zanesville, Ohio	1	

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.
Camp Bowie zone, Tex	6
Camp Gordon zone, Ga	7
Camp Greene zone, N. C	11
Gulfport health district, Miss	1
Camp Jackson zone, S. C	8
Camp Joseph E. Johnston zone, Fla	6
Camp Lee zone, Va	1
Camp Logan zone, Tex	6
Camp MacArthur zone, Tex	10
Camp McClellan zone, Ala	1
Fort Oglethorpe zone, Ga. and Tenn	11
Picric Acid Plant zone, Ga	3
Camp Pike zone, Ark	6
Portsmouth and Norfolk County health district, Va	2
Portsmouth-Kittery sanitary district, N. H. and Me	1
Camp Sheridan zone, Ala	6
Camp Zachary Taylor zone, Ky. and Ind	16
Camp Travis zone, Tex	6

TETANUS.

City Report for Week Ended Dec. 14, 1918.

During the week ended December 14, 1918, there was one death from tetanus reported at New York, N. Y.

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TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.
Camp Bowie zone, Tex.	2
Bremerton zone, Wash.	1
Charleston sanitary district, S. C.	1
Gas and Flame School zone, Ga. and Ala.	4
Camp Gordon zone, Ga.	1
Gulfport health district, Miss.	1
Camp Joseph E. Johnston zone, Fla.	3
Fort Leavenworth zone, Kans.	1
Camp Lee zone, Va.	1
Camp Logan zone, Tex.	1
Camp MacArthur zone, Tex.	1
Camp Merrit zone, N. J.	1
Pensacola sanitary district, Fla.	1
Picric Acid Plant zone, Ga.	2
Camp Pike zone, Ark.	10
Portsmouth-Kittery sanitary district, N. H. and Me.	1
Camp Zachary Taylor zone, Ky. and Ind.	9
Tidewater health district, Va.	1
Camp Travis zone, Tex.	1
Vancouver zone, Wash.	5
Wilmington sanitary district, N. C.	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 24.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Dec. 28, 1918.

	Cases.
Camp Bowie zone, Tex.	1
Charleston sanitary district, S. C.	1
Camp Doniphan zone, Okla.	4
Gerstner Field zone, La.	1
Camp Greene zone, N. C.	1
Camp Jackson zone, S. C.	1
Camp Merrit zone, N. J.	3
Fort Oglethorpe zone, Ga. and Tenn.	1
Camp Polk zone, N. C.	1
Wilmington sanitary district, N. C.	1

State Reports for November, 1918.

Place.	New cases reported.
District of Columbia	5
Illinois:	
Adams County—	
Quincy	2
Cook County—	
Chicago	5
La Grange	1
Effingham County—	
Montrose	1
Knox County—	
Galesburg	1
Lake County—	
North Chicago	2
La Salle County—	
Streator	1
Macoupin County—	
Verden	1
Randolph County—	
Sparta precinct	1
Rock Island County—	
Milan	1
Moline	1
Wabash County—	
Mount Carmel	1
Washington County—	
Irvington	1
Will County—	
Joliet	1
State institutions—	
Lincoln State School and Colony	2
Total	22
Maine:	
Cumberland County—	
Portland	2
Gorham (town)	1
Sagadohoc County—	
Bath	1
Total	4
Maryland:	
Baltimore	13
Allegany County—	
Cumberland	1
Lonaconing	1
Anne Arundel County—	
Nutwell	2
Bristol	1
Brooklyn	4
Baltimore County—	
Towson	1
Arlington	1
Morrell Park	1
Catonsville	2
Caroline County—	
Bethlehem, R. D.	1
Bethlehem	1
Federalsburg	1
Smithson	1
Carroll County—	
New Port Hill	2
Cecil County—	
Port Deposit	1
North East	1
Charles County—	
Waldorf	1
White Plains	1
Mount Victoria	1
Mason Springs	1
Ryceville	1
White Plains	1
Dorchester County—	
Cambridge	5
Lakesville	5
Hurlock	1
Frederick County—	
Brunswick	1
Harford County—	
Havre de Grace	4
Grave Hill	1
Pylesville	1
Carsins	1
Gibson	1

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TYPHOID FEVER—Continued.

State Reports for November, 1918—Continued.

Place.	New cases reported.
Maryland—Continued.	
Kent County—	
Chestertown, R. D.	1
Prince Georges County—	
Suitland	1
Queen Annes County—	
Centerville	1
Somerset County—	
Princess Anne, R. D.	1
Marion	1
Talbot County—	
Willoughby	1
Washington County—	
Sharpsburg	1
Lantz, R. D.	1
Hagerstown	4
Hancock, R. D.	1
Smithsburg	1
Bakersville	3
Wicomico County—	
Jesterville	1
Royal Oaks	1
Salisbury	1
Worcester County—	
Berlin	2
Stockton	1
Pocomoke City	2
Total	85
Mississippi:	
Adams County	3
Alcorn County	3
Attala County	6
Bolivar County	30
Calhoun County	12
Carroll County	1
Coahoma County	6
Copiah County	16
Covington County	2
De Soto County	4
Grenada County	2
Harrison County	4
Hinds County	4
Holmes County	7
Itawamba County	2
Jefferson County	1
Jones County	2
Kemper County	3
Lafayette County	7
Lamar County	1
Lauderdale County	2
Lawrence County	6
Leake County	3
Lee County	8
Leflore County	9
Lincoln County	2
Lowndes County	1
Madison County	3
Marion County	2
Marshall County	7
Monroe County	6
Neshoba County	4
Newton County	1
Oktibbeha County	5
Panola County	5
Pontotoc County	3
Prentiss County	3
Quitman County	1
Scott County	1
Sharkey County	2
Smith County	4
Sunflower County	11
Tallahatchie County	7
Tate County	11
Tippah County	11
Tishomingo County	6
Tunica County	2
Warren County	3

Place.	New cases reported.
Mississippi—Continued.	
Winston County	3
Yalobusha County	2
Yazoo County	5
Total	255
North Carolina:	
Alexander County	1
Ashe County	3
Burke County	1
Caldwell County	3
Carteret Couty	1
Cleveland County	7
Craven County	1
Durham County	12
Edgecombe County	1
Forsyth County	5
Gaston County	2
Gates County	1
Graham County	1
Greene County	1
Guilford County	1
Harnett County	2
Haywood County	1
Jackson County	2
Johnston County	7
Lincoln County	1
Madison County	1
Martin County	1
McDowell County	3
Mecklenburg County	1
Richmond County	1
Rockingham County	3
Sampson County	1
Stanly County	1
Stokes County	1
Union County	1
Wake County	1
Watauga County	1
Wayne County	1
Wilson County	1
Total	72
North Dakota:	
Burleigh County	2
Cass County	2
Total	4
Oregon:	
Benton County	1
Hood River County	6
Klamath County	2
Lane County	2
Union County	2
Portland	2
Total	15
Rhode Island:	
Newport	2
Providence	4
Total	6
South Carolina:	
Charleston County	2
Chesterfield County	5
Greenville County	5
Greenwood County	1
Kershaw County	1
Richland County	3
Spartanburg County	2
York County	4
Total	23

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State Reports for November, 1918.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
District of Columbia	48	11	12	North Carolina	182	38	82
Illinois	685	73	167	North Dakota	9	1	12
Iowa	95	.....	117	Oregon	14	15	16
Maine	29	4	10	Rhode Island	69	4	36
Maryland	124	165	47	South Carolina	147	24	6
Mississippi	287	21	293	Wyoming	6	9	5

City Reports for Week Ended Dec. 14, 1918.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams, Mass	14,406	3	2	.....	.....	.....	.....	.....	1	.....
Akron, Ohio	93,604	52	6	.....	.....	.....	1	.....	12	.....
Alameda, Cal	28,433	11	1	.....	.....	.....	1	.....	2	.....
Alexandria, La	16,232	5	.....	.....	.....	.....	.....	.....	.....	.....
Allentown, Pa	65,109	.....	.....	.....	3	.....	1	.....	1	.....
Alton, Ill	23,783	17	.....	.....	.....	.....	.....	.....	.....	1
Altoona, Pa	59,712	.....	10	.....	.....	.....	.....	.....	.....	.....
Amarillo, Tex	20,882	.....	.....	.....	.....	.....	1	1	1	1
Anderson, Ind	24,230	10	.....	.....	.....	.....	.....	.....	.....	.....
Ann Arbor, Mich	15,041	11	1	.....	.....	.....	.....	.....	.....	.....
Ansonia, Conn	16,954	6	.....	.....	.....	.....	.....	.....	1	.....
Appleton, Wis	18,005	9	.....	.....	.....	.....	.....	.....	.....	.....
Arlington, Mass	13,073	11	.....	.....	.....	.....	.....	.....	4	1
Asbury Park, N. J	14,629	4	.....	.....	.....	.....	.....	.....	.....	1

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Bristol, Conn.	10,313	7					4			1
Brookline, Mass.	33,526	9					2			2
Brunswick, Ga.	10,984	9			8				2	
Buffalo, N. Y.	475,781	206	50	4	11		18		12	18
Burlington, Iowa	25,144	17					2			
Butler, Pa.	28,677		1							
Butte, Mont.	44,057				2		6			
Cairo, Ill.	15,995	6								
Cambridge, Mass.	114,293	46	1				1		5	7
Camden, N. J.	108,117		2				8		1	
Canton, Ohio	62,566	28	3				1		1	1
Carlisle, Pa.	10,795		1							
Centralia, Ill.	11,838						1			
Chambersburg, Pa.	12,475						1			
Champaign, Ill.	15,052	9								
Charleston, S. C.	61,041	35	1							2
Charleston, W. Va.	31,060	18	2				2			
Charlotte, N. C.	40,759	20								1
Chelsea, Mass.	48,405	13							2	
Chester, Pa.	41,857		1						2	
Chicago, Ill.	2,547,201	1,062	119	14	26	4	36	2	186	71
Chicopee, Mass.	29,950	16	1						4	2
Chillicothe, Ohio	15,625	6			5					2
Cincinnati, Ohio	414,248	328	14	1			6		14	16
Cleveland, Ohio	692,259	413	28	5	1		10		18	22
Clinton, Mass.	[1] 13,075	5								
Coffeyville, Kans.	18,331								1	
Cohoes, N. Y.	25,292	9					2			2
Colorado Springs, Colo.	38,965	36							3	5
Columbia, S. C.	35,165				6					
Columbus, Ga.	26,306	17			1				1	
Columbus, Ohio	220,135	161			1		2		5	9
Concord, N. H.	22,858	14								2
Connellsville, Pa.	15,876		2						1	
Corpus Christi, Tex.	10,789	8	1							
Cortland, N. Y.	13,321	2								
Council Bluffs, Iowa	31,838	19								
Covington, Ky.	59,623	50								5
Cranston, R. I.	26,773	11	1				2			1
Crawfordsville, Ind.	11,443	6								

[1] Population Apr. 15, 1910.

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Glens Falls, N. Y.	15,[illegible]	5							
Grand Rapids, Mich.	17,160	6	1		1				
Green Bay, Wis.	132,861	83	4		2		6	4	3
Greenfield, Mass.	30,017	25						1	1
Greenwich, Conn.	12,251	4			1		3		
Hackensack, N. J.	19,594				1		5		
Hammond, Ind.	17,412	11						1	2
Harrisburg, Pa.	27,016	11					1		
Harrison, N. J.	73,276	5			7		1		
Hartford, Conn.	17,345							2	
Hattiesburg, Miss.	112,831	53	5		17		7	4	4
Hazelton, Pa.	17,357							1	
Helena, Ark.	28,981						5		
Henderson, Ky.	11,122	8						1	1
Highland Park, Mich.	12,312	8							
Hoboken, N. J.	33,859	26						2	
Holland, Mich.	78,324	16	2	2				2	2
Holyoke, Mass.	12,459	6							1
Houston, Tex.	66,503	48	3				5	1	5
Independence, Mo.	116,878	53	3				2	2	3
Indianapolis, Ind.	11,964	28							
Ithaca, N. Y.	283,622	136	10	2	3		1	1	10
Jackson, Mich.	16,017	6	1						
Jacksonville, Ill.	35,996	14	2	1	1		1		
Jamestown, N. Y.	15,506	11							
Janesville, Wis.	37,431	8	2				2		1
Jersey City, N. J.	14,411	5							1
Johnstown, Pa.	312,557	17					5	8	
Kalamazoo, Mich.	70,473	8			1			4	
Kankakee, Ill.	50,408	41	1		2		3		
Kansas City, Kans.	14,270		1						
Kansas City, Mo.	102,096		1		1		1	4	
Kearny, N. J.	305,816	330	8	2			2	3	12
Kenosha, Wis.	21,325	10					2	2	
Kingston, N. Y.	32,833	4					1		
Knoxville, Tenn.	26,910	12	4						1
Kokomo, Ind.	59,112		4		3		2	3	3
Lackawanna, N. Y.	21,929	12						1	
La Crosse, Wis.	16,219	13	1	1	13			2	
	31,833	23							2

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Martinsburg, W. Va.	12,[illegible]						1			
Mason City, Iowa	14,938	16								
Medford, Mass	26,681	5	1	1			1		2	
Melrose, Mass	17,724	7								1
Memphis, Tenn	151,877	54	2		9		2		11	2
Meridian, Miss	21,824								1	
Middletown, Ohio	16,384	16					2			1
Milford, Mass	14,280	6								
Milwaukee, Wis	445,008	299	14	3	2		21	1	25	10
Minneapolis, Minn	373,448	151	20		1		4			9
Mishawaka, Ind	17,083	10								
Missoula, Mont	19,075	22								
Mobile, Ala	59,201	34	1							2
Moline, Ill	27,976	30					3			
Monessen, Pa	23,070		5		1					
Montclair, N. J	27,087									1
Montgomery, Ala	44,039	22	3				1			1
Morgantown, W. Va	14,444	10							1	1
Morristown, N. J	13,410	4								
Mount Carmel, Pa	20,709		2						1	
Mount Vernon, N. Y	37,991		1						2	
Mount Vernon, Ohio	10,877	10								1
Muncie, Ind	25,653		3						3	
Muskogee, Okla	47,173						1			
Nanticoke, Pa	23,811		2		1					
Nashua, N. H	27,541	8					4			
Nashville, Tenn	118,136	57	4	1	16		3	1	5	2
Newark, Ohio	30,317	11					3			
New Bedford, Mass	121,622	48	5	2					8	8
New Britain, Conn	55,385	7	5		1		3			
Newburgh, N. Y	29,803	14								
Newburyport, Mass	15,291	5			1					
New Castle, Pa	41,915						1		4	
New Haven, Conn	152,275	65	14	1	1		2		5	5
New London, Conn	21,199	13	7				2			2
New Orleans, La	377,010	195	4		1		3		35	25
Newport, Ky	32,133	27								
Newport, R. I	30,585	12								1
Newton, Mass	44,345	18			1		1		2	
New York, N. Y	5,737,492	1,060	220	23	14		81	3	241	137
Niagara Falls, N. Y	38,466	48			2				1	2
Norfolk, Va	91,148						2			
North Adams, Mass	[1] 22,019	1								
Northampton, Mass	20,006	14	1							1
North Attleboro, Mass	11,248	4								
North Braddock, Pa	15,684		1							
North Tonawanda, N. Y	14,060	4	2							

[1] Population Apr. 15, 1910.

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[illegible]	[1] 18,583	12								
Winston-Salem, N. C.	33,136	25								1
Woburn, Mass.	16,076	7							1	1
Worcester, Mass.	166,106	64	5		6		2		1	3
Yonkers, N. Y.	103,066	31	4		1		4		12	2
Youngstown, Ohio.	112,282	58	3		7		1		4	1
Zanesville, Ohio.	31,320	28	1						1	

[1] Population Apr. 15, 1910.

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at Foggia.

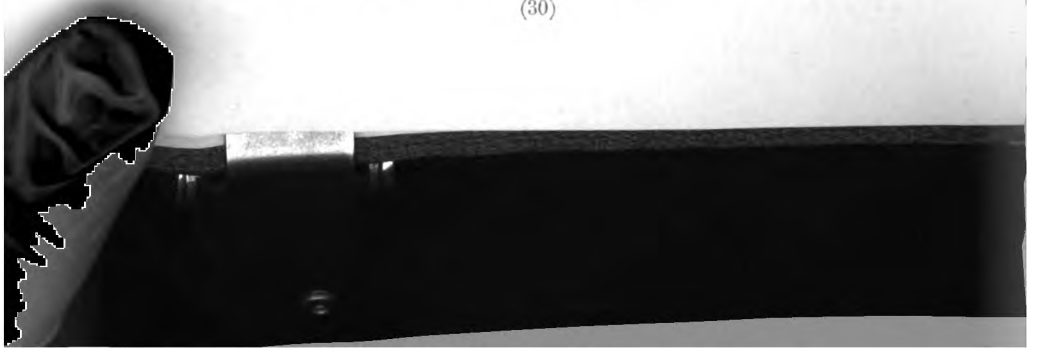
CHOLERA, PLAGUE, SMALLPOX, AND TYPHUS FEVER.

Reports Received During Week Ended January 3, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Madras	Oct. 5-26	36	18	
Rangoon	Oct. 5-12	1	1	
Indo-China:				
Anam	Aug. 1-31	5	5	
Cambodia	do	98	71	
Cochin-China	do	110	89	
Tonkin	do	1		
Java:				
East Java				Oct. 7-21, 1918: Cases, 109; deaths, 94.
Surabaya	Oct. 7-21	7	6	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 1,389; deaths, 867.
Samarang	Sept. 25-Oct. 16	120	111	
West Java				Oct. 2-23, 1918: Cases, 190; deaths, 112.
Batavia	Oct. 2-23	140	84	
Philippine Islands:				
Manila	Nov. 2-9	8	4	
Provinces				Nov. 2-9, 1918: Cases, 264; deaths, 211.
Batangas	Nov. 2-9	45	44	
Bohol	do	17	15	
Cavite	do	18	12	
Iloilo	do	6	3	
Oriental Negros	do	16	5	
Pangasinan	do	148	123	
Tayabas	do	7	4	
Union	do	7	5	

[1] From medical officers of the Public Health Service, American consuls, and other sources. For reports received from June 29, 1918, to Dec. 27, 1918, see Public Health Reports for Dec. 27, 1918. The tables of epidemic diseases are terminated semiannually and new tables begun.



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47 of the men were without history of an attack of influenza during the recent epidemic and 39 of these were without history of an attack of such illness at any time during their lives.

The experiments consisted of inoculations with pure cultures of Pfeiffer's bacillus, with secretions from the upper respiratory passages, and with blood from typical cases of influenza. The study was begun on November 13 with an experiment in which a suspension of a freshly isolated culture of Pfeiffer's bacillus was instilled into the nose of each of 3 nonimmunes and into 3 controls who had a history of an attack in the present epidemic. None of these volunteers showed any reaction following this inoculation. Another experiment was made at a later date with a suspension of a number of different pure cultures of Pfeiffer's bacillus, of which 4 were recently isolated. Ten presumably nonimmune volunteers were inoculated, with the same negative results.

Three sets of experiments were made with secretions, both unfiltered and filtered, from the upper respiratory tract of typical cases of influenza in the active stage of the disease. In these experiments a total of 30 men were subjected to inoculation by means of spray,

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swab, or both, of the nose and throat. The interval elapsing between securing secretions from the donors and inoculation of the volunteers was progressively reduced in these experiments so that in the third of the series the interval at most was 30 seconds. In no instance was an attack of influenza produced in any one of the subjects. An experiment was made in which the members of one of the groups of volunteers which had been subjected to inoculation with secretions were exposed to a group of cases of influenza in the active stage of the disease in a manner intended to simulate conditions which in nature are supposed to favor the transmission of the disease. Each of this group of 10 volunteers came into close association for a few minutes with each of 10 selected cases of influenza in the wards of the Chelsea Naval Hospital. At the time the volunteers were exposed to this infection the cases were from 10 to 84 hours from the onset of their illness and 4 of them were not over 24 hours after the onset. Each volunteer conversed a few minutes with each of the selected patients, who were requested to, and coughed into the face of each volunteer in turn, so that each volunteer was exposed in this manner to all 10 cases. The total exposure amounted to about three-quarters of an hour for each volunteer. None of these volunteers developed any symptoms of influenza following this experiment.

Advantage was taken of the opportunity for making this study to attempt to confirm the reported positive results of transmission of influenza by Nicolle. Secretions from 5 typical cases of influenza were secured, filtered, and some of the filtrate was inoculated subcutaneously into each of the group of 10 volunteers. At the same time blood was drawn from the same cases and pooled, and some of the mixed blood injected subcutaneously into each of another group of 10 volunteers. The time lost between drawing the blood and inoculating it in no case exceeded three-quarters of an hour. None of the men subjected to these inoculations developed any evidences of illness.

In the foregoing experiments the patients serving as donors belonged to groups from epidemic foci either on shipboard or at institutions. The great majority indeed belonged in a group from an epidemic on board the U. S. S. *Yacona*. Of the personnel of this vessel, 95 in number, 80, or 84 per cent, were stricken with the disease in an epidemic between November 17 and 29.

SAN FRANCISCO EXPERIMENTS.

The following observations were carried out practically simultaneously with those described above. The work was done at the Angel Island Quarantine Station, San Francisco, Cal., utilizing volunteers from the Yerba Buena Naval Training Station, San Francisco. The experiments were carried on jointly by Surg. G. W.

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[redacted] The other group had the same material used after passage through a Berkefeld N candle. The results were negative, though the men were held under observation for seven days.

Work With Secretions.

Four groups of volunteers, of 10 men each, were used for these experiments. Emulsions of secretions from the upper respiratory passages of active cases of influenza from 15 to 48 hours from the onset were instilled into the nose by means of a medicine dropper or with an atomizer. In each experiment approximately an equal number of volunteers were treated with the same emulsion after filtration through a Berkefeld N candle. In every case the results were negative, so far as the reproduction of influenza is concerned. The men were all observed for 7 days after inoculation. In 3 cases in which unfiltered material had been instilled sore throat developed which corresponded clinically with acute tonsillitis, and in two of these cases an almost pure culture of a hæmolytic streptococcus was secured from throat cultures.

A filtered emulsion of material from the upper air passages of an acute case of influenza was dropped into the conjunctivæ of 2 volunteers and the same material injected subcutaneously into 1 volunteer. In each case the result was negative.

One cubic centimeter of blood taken during the active stage of influenza was inoculated subcutaneously into 1 volunteer with negative results.

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In all of these experiments the time between the collection of the material from the patient and its inoculation into the volunteers was in the neighborhood of 3 or 4 hours. The conditions under which it was necessary to conduct experiments did not permit of a shorter interval. The unfiltered suspensions which were used were submitted to cultural examination after inoculation and found to contain living organisms as follows: Pfeiffer's bacillus, pneumococci of group 4, and hæmolytic streptococci.

EDITORIAL NOTE.—The foregoing experiments, though extremely interesting, do not, of course, warrant final conclusions. It is hoped that it may be possible to carry the studies further and that results may be obtained that will definitely settle the nature and the mode of spread of the virus of epidemic influenza. For the present the sanitarian will do well to continue to apply the general principles of control that are based on the justifiable assumption that the disease is a droplet infection, giving, however, increased attention to a point that is suggested by these experiments—namely, an infective period at the very earliest stages of the attack.

It would seem to be wise to give renewed emphasis to the importance of going to bed at the slightest indications of illness.

EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

The prevalence of influenza in the United States, as reported to the Public Health Service by State health officers, is shown under the heading "Current State Summaries," page 46, of this issue of the Public Health Reports. In general, the reports do not show decided changes in the number of cases of the disease as compared with the preceding week.

Slight increases in the number of cases are reported from Alabama, Arkansas, California, Connecticut, Kansas, Louisiana, Massachusetts, New Jersey, North Carolina, Oregon, Vermont, and Virginia. Slight decreases in the number of cases are reported from Illinois, Indiana, Iowa, Maine, and Michigan.

The cases reported in the zones around military camps are shown on page 50. Data from these zones for preceding weeks are given in the Public Health Reports, vol. 34, No. 1, January 3, 1919, pages 1 and 2.

RURAL SANITATION A PRESENT NECESSITY.

Time and again students of public health have called attention to the backward state of sanitary conditions in rural districts and to the influence of this on the health of city dwellers. There is considerable evidence, moreover, to show that whereas in cities health conditions,

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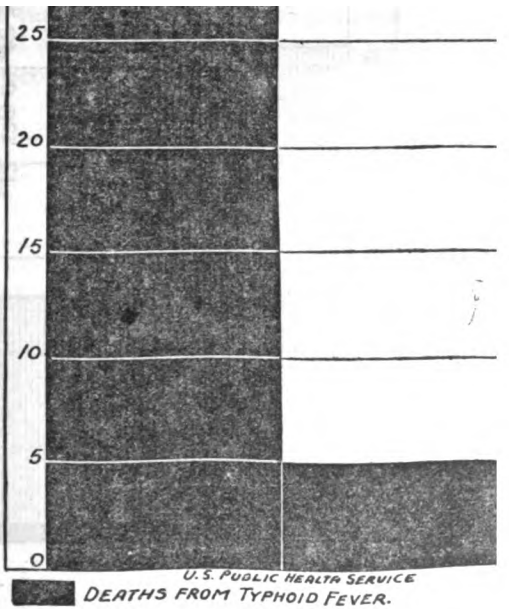
Health Service began a survey in 15 counties located in various parts of the United States. This study has already been so fruitful that the results obtained have been embodied in a progress report, "Rural Sanitation,"[1] by Surg. L. L. Lumsden, under whose direction the work was conducted.



While the sanitary problems encountered in various parts of the country vary considerably, several of them are common to all, namely, the proper disposal of human excreta, and education of the people in health matters. In the surv just mentioned over 51,000 country homes were visited and surveye and nearly 20,000 of these were subsequently revisited.

[1] Rural Sanitation, A report on special studies made in 15 counties in 1914, 1915, and 1916. Pu Health Bulletin 94, October, 1918. Government Printing Office, Washington, D. C.

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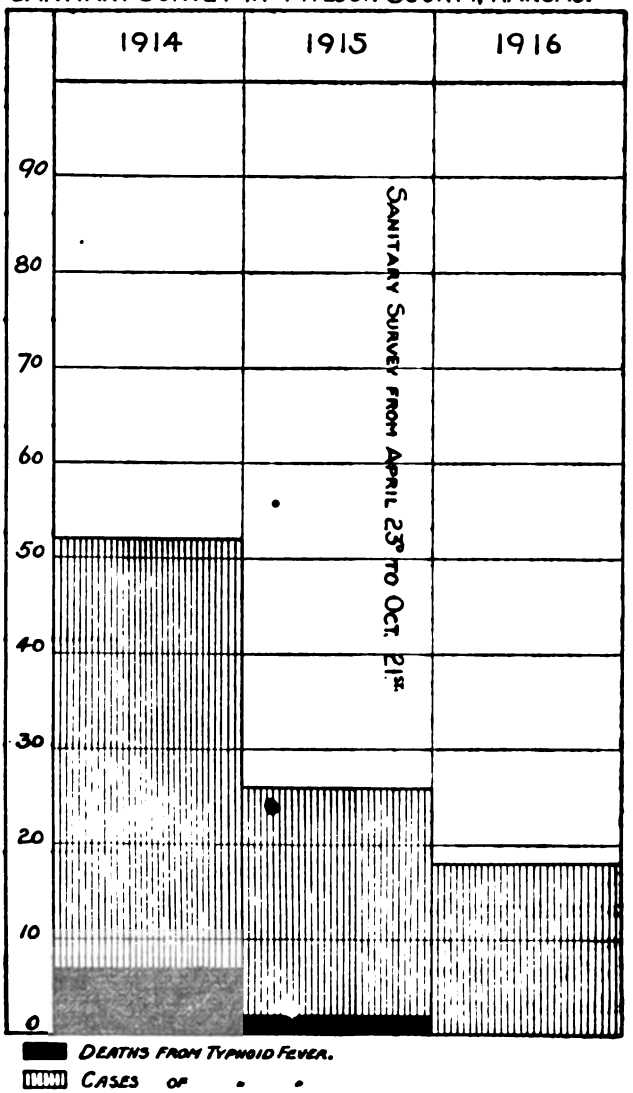
Of these 51,000 homes only 1.22 per cent were equipped for the sanitary disposal of human excreta; at 68 per cent the water supply used for drinking and ordinary purposes was obviously exposed to potentially dangerous contamination from privy contents or from

CHART 10:- TYPHOID FEVER REDUCTION FOLLOWING SANITARY SURVEY IN WILSON COUNTY, KANSAS.



promiscuous deposits of human excreta. In the majority of homes the water was exposed also to unwholesome pollution from stable yards and pig sties. At only 32.88 per cent of the farm houses were the dwellings during the summer season effectively screened to prevent flies from carrying filth into kitchens and dining rooms.

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The lack of knowledge concerning health matters paralleled the insanitary conditions disclosed by the survey, and very likely was largely responsible for these conditions. However, it is certainly encouraging to find that at only 91 of the 51,000 farm houses visited did the investigators fail to meet with a reasonably cordial reception. The people generally expressed their approval of the plan and purpose of the survey and appeared anxious to obtain suggestions about the measures needed for correction of insanitary conditions at their homes.

During the course of the work 865 public lectures were given to a total of over 105,000 persons.

So far as the results thus far obtained from this survey are concerned, it is interesting to observe the course of the typhoid fever rate, for this is generally accepted as perhaps the most reliable single index of this kind of health work. With few exceptions there was a remarkable decrease in the prevalence of typhoid fever in all the 15 counties where the work was carried on. The degree of the reduction is well shown by accompanying typical charts reproduced from the bulletin.

The work carried on in the 15 counties covered by this report shows not only that intensive public health work in rural communities is urgently needed, but that the results of well-planned work in the field are so excellent that expenditures for intensive rural health work constitute really wise economy.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED JAN. 4.

CAMP BEAUREGARD ZONE, LA.

	Cases.
Gonorrhea:	
Alexandria	4
Influenza:	
Alexandria	108
Pineville	46
Rural district	20
Measles:	
Alexandria	1

CAMP BOWIE ZONE, TEX.

Fort Worth:	
Chicken pox	2
Diphtheria	1
Gonorrhea	5
Influenza	9
Measles	1
Pellagra	1
Pneumonia	36
Syphilis	1
Tuberculosis	3

BREMERTON ZONE, WASH.

Influenza	1
Scarlet fever	2

CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	
Diphtheria	2
Influenza	105

CAMP DEVENS ZONE, MASS.

Influenza:	
Ayer	3
Harvard	5
Lancaster	22
Lunenburg	37
Shirley	4
Mumps:	
Harvard	3
Pneumonia:	
Lunenburg	1
Shirley	2
Scarlet fever:	
Ayer	1
Whooping cough:	
Lunenburg	1

CAMP DIX ZONE, N. J.

	Cases.
Diphtheria:	
New Hanover Township	2
Influenza:	
Mansfield Township	1
Pemberton Borough	24

CAMP DODGE ZONE, IOWA.

Bloomfield Township:	
Mumps	1
Des Moines:	
Diphtheria	4
Influenza	9
Scarlet fever	5
Smallpox	1
Grimes:	
Influenza	4

CAMP DONIPHAN ZONE, OKLA.

Comanche County:	
Influenza	11
Lawton:	
Gonorrhea	4
Influenza	1
Pneumonia	1

CAMP EBERTS ZONE, ARK.

Diphtheria:	
Carlisle	1
Gonorrhea:	
England	1
Influenza:	
Austin, R. F. D.	1
Cabot	15
Cabot, R. F. D.	6
Carlisle	1
England	2
England, R. F. D.	1
Lonoke	4
Lonoke, R. F. D.	33
Ward	25
Malaria:	
England	1
Pneumonia:	
England	1
Septic sore throat:	
Ward	2

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CAMP FUNSTON ZONE, KANS.

	Cases.
Chicken pox:	
Manhattan	1
Gonorrhea:	
Junction City	1
Influenza:	
Finsh	1
Manhattan	16
Ogden	2
Randolph	17
Measles:	
Manhattan	1
Meningitis carriers:	
Junction City	2
Mumps:	
Manhattan	4
Pneumonia:	
Manhattan	3
Scarlet fever:	
Manhattan	3

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Chicken pox:	
Columbus	1
Diphtheria:	
Phenix City	1
Influenza:	
Bibb City	1
Columbus	49
Girard	2
Muscogee County	25
Phenix City	12
Measles:	
Columbus	5
Pneumonia:	
Columbus	5
Girard	2
Smallpox:	
Columbus	4
Tuberculosis:	
Columbus	1

GERSTNER FIELD ZONE, LA.

Influenza	82
Pneumonia	5
Smallpox	15

CAMP GORDON ZONE, GA.

Atlanta:	
Chicken pox	1
Gonorrhea	40
Influenza	52
Measles	1
Pneumonia	3
Scarlet fever	2
Smallpox	19
Syphilis	21
Tuberculosis	1

CAMP GREENE ZONE, N. C.

Charlotte Township:	
Cerebrospinal meningitis	1
Chancroid	3
Gonorrhea	7
Influenza	62
Mumps	2
Scarlet fever	1
Syphilis	8

GULFPORT HEALTH DISTRICT, MISS.

	Cases.
Diphtheria:	
Biloxi	1
Gonorrhea:	
Gulfport	2
Kiln	1
Pascagoula	3
Hookworm:	
Biloxi	6
Influenza:	
Bay St. Louis	8
Biloxi	177
Gulfport	235
Handsboro	3
Long Beach	36
Lyman	19
Mississippi City	4
Moss Point	37
Ocean Springs	7
Pascagoula	16
Pass Christian	27
Saucier	3
Scattered	13
Malaria:	
Gulfport	1
Moss Point	3
Mumps:	
Gulfport	1
Pascagoula	1
Pneumonia:	
Biloxi	17
Gulfport	7
Long Beach	2
Lyman	1
Mississippi City	1
Moss Point	1
Pass Christian	1

CAMP HANCOCK ZONE, GA.

Augusta:	
Cerebrospinal meningitis	2
Gonorrhea	2
Influenza	188
Syphilis	19

CAMP HUMPHREYS ZONE, VA.

Alexandria:	
Influenza	61
Pneumonia	1
Scarlet fever	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Influenza	45
Measles	1
Pneumonia	3
Typhoid fever	1
United States Government Clinic:	
Gonorrhea	1
Syphilis	15

CAMP JOSEPH E. JOHNSTON ZONE, FLA.

Jacksonville:	
Chancroid	3
Gonorrhea	21
Influenza	15
Measles	43
Pneumonia	2

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CAMP JOSEPH E. JOHNSTON ZONE, FLA.—contd.

Jacksonville—Continued.	Cases.
Scarlet fever	1
Syphilis	35
Tuberculosis	4

FORT LEAVENWORTH ZONE, KANS.

Diphtheria:	
Leavenworth	2
Gonorrhea:	
Leavenworth	1
Influenza:	
Leavenworth	3
Leavenworth County	24

CAMP LEE ZONE, VA.

Ettrick:	
Diphtheria	1
Influenza	4
Petersburg:	
Diphtheria	1
Influenza	456
Measles	4
Pneumonia	19
Tuberculosis	3
Prince George County:	
Influenza	5

CAMP LEWIS ZONE, WASH.

Influenza:	
American Lake	1
Lakeview	3
Loveland	13
Spanaway	1

CAMP LOGAN ZONE, TEX.

Houston:	
Chancroid	2
Gonorrhea	8
Influenza	5
Syphilis	32

CAMP MACARTHUR ZONE, TEX.

Waco:	
Gonorrhea	2
Influenza	2
Pneumonia	3
Syphilis	1
Tuberculosis	3

CAMP M'CLELLAN ZONE, ALA.

Anniston:	
Gonorrhea	2
Influenza	5
Mumps	2
Pneumonia	1
Syphilis	3
Precinct 15:	
Influenza	1

CAMP MERRITT ZONE, N. J.

Cerebrospinal meningitis:	
Englewood	1
Chicken pox:	
Englewood	1
Tenafly	1
Diphtheria:	
Tenafly	1

CAMP MERRITT ZONE, N. J.—continued.

Erysipelas:	
Englewood	1
Gonorrhea:	
Englewood	2
Influenza:	
Closter	5
Dumont	3
Englewood	96
Haworth	1
Pneumonia:	
Dumont	1
Englewood	6
Haworth	2
Scarlet fever:	
Englewood	1

FORT OGLETHORPE ZONE, GA. AND TENN.

Diphtheria:	
Chattanooga	1
Influenza:	
Chattanooga	53
Eastlake	2
North Chattanooga	6
Measles:	
Chattanooga	1
North Chattanooga	1
Scarlet fever:	
Chattanooga	1

PENSACOLA SANITARY DISTRICT, FLA.

Influenza	46
Pneumonia	1
Tuberculosis	1

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Cerebrospinal meningitis	1
Influenza	10
Measles	10
Pneumonia	1

CAMP PIKE ZONE, ARK.

Chancroid:	
Little Rock	1
Chicken pox:	
Little Rock	2
Diphtheria:	
Little Rock	1
Gonorrhea:	
Little Rock	18
North Little Rock	1
Scott	1
Influenza:	
Cabot	1
Little Rock	113
North Little Rock	18
Laryngitis:	
Little Rock	1
Malaria:	
Little Rock	1
North Little Rock	1
Measles:	
Little Rock	6
North Little Rock	6
Meningitis:	
Little Rock	1

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CAMP PIKE ZONE, ARK.—continued.

	Cases.
Mumps:	
Little Rock	2
Pneumonia:	
Little Rock	10
North Little Rock	1
Scarlet fever:	
Little Rock	1
Syphilis:	
Little Rock	14

CAMP POLK ZONE, N. C.

Chicken pox:	
Durham	1
Influenza:	
Durham	90
Durham County	62
Raleigh	97
Measles:	
Wake County	1
Pneumonia:	
Wake County	1
Scarlet fever:	
Durham County	2
Wake County	2
Smallpox:	
Durham	2
Tuberculosis, pulmonary:	
Wake County	2
Typhoid fever:	
Wake County	1
Whooping cough:	
Durham	1
Wake County	2

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Chancroid:	
Norfolk	1
Diphtheria:	
Port Norfolk	1
Portsmouth	1
South Norfolk	1
Gonorrhea:	
Norfolk	6
Influenza:	
Norfolk	2
Norfolk County	41
Portsmouth	112
Measles:	
Ocean View	2
Pneumonia:	
Portsmouth	3
Syphilis:	
Norfolk	3

PORTSMOUTH-KITTERY SANITARY DISTRICT, N. H. AND ME.

Chicken pox:	
York	1
Gonorrhea:	
Portsmouth	2
Influenza:	
Hampton Falls	8
Portsmouth	49
York	1

CAMP SEVIER ZONE, S. C.

	Cases.
Chicken pox:	
Greenville (suburban)	2
Influenza:	
Greenville and vicinity	141
Mumps:	
Greenville	1
Pneumonia:	
Greenville and vicinity	4
Tuberculosis:	
Greenville	1
Whooping cough:	
Greenville	3

CAMP SHERIDAN ZONE, ALA.

Montgomery:	
Chicken pox	3
Gonorrhea	5
Scarlet fever	1
Tuberculosis, pulmonary	1
United States Government Clinic:	
Gonorrhea	4
Syphilis	5

CAMP SHERMAN ZONE, OHIO.

Chillicothe:	
Diphtheria	1
Influenza	3
Scarlet fever	1
Typhoid fever	1
Ross County:	
Influenza	23
United States Government Clinic:	
Gonorrhea	4
Syphilis	1

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Chancroid:	
United States Government clinic	1
Diphtheria:	
Clark County	1
Jefferson County	1
Louisville	5
Gonorrhea:	
Venereal clinic, county jail	13
United States Government clinic	17
Influenza:	
Clark County	32
Floyd County	11
Jefferson County	59
Jeffersonville	18
Louisville	77
New Albany	40
Measles:	
Jefferson County	1
Louisville	2
Pneumonia:	
Louisville	1
Rabies in animal:	
Louisville	1
Scarlet fever:	
Louisville	1
Syphilis:	
Venereal clinic, county jail	6
United States Government clinic	19
Tuberculosis:	
Louisville	7

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TIDEWATER HEALTH DISTRICT, VA.

Newport News:	Cases.
Chicken pox	1
Gonorrhea	1
Influenza	151
Measles	4
Pneumonia	1
Scarlet fever	1
Syphilis	1
Tuberculosis	2
Phoebus:	
Measles	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chancroid	3
Gonorrhea	19
Influenza	106
Measles	1
Pneumonia	8
Syphilis	5
Tuberculosis	7
Typhoid fever	2

CAMP UPTON ZONE, N. Y.

Riverhead:	
Mumps	1
Pneumonia	1

VANCOUVER ZONE, WASH.

Influenza	41

CAMP WADSWORTH ZONE, S. C.

Influenza:	Cases.
Drayton	12
Spartanburg	26
Measles:	
Spartanburg	1
Pneumonia:	
Fairforest	1

CAMP WHEELER ZONE, GA.

Macon:	
Diphtheria	1
Influenza	27
Measles	4
Meningitis	1
Scarlet fever	1

WILMINGTON SANITARY DISTRICT, N. C.

Cape Fear Township:	
Influenza	3
Wilmington:	
Chicken pox	3
Influenza	31
Measles	1
Mumps	1
Pneumonia	2
Scarlet fever	1
Tuberculosis	2
Typhoid fever	3

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.[1]

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended December 27, 1918:

Annual admission rate per 1,000 (disease only):	
All troops	787.55
Divisional camps	716.42
Cantonments	734.11
Departmental and other troops	890.01
Noneffective rate per 1,000 on day of report:	
All troops	42.03
Divisional camps	42.67
Cantonments	37.93
Departmental and other troops	46.91
Annual death rate per 1,000 (disease only):	
All troops	12.17
Divisional camps	6.67
Cantonments	11.37
Departmental and other troops	15.90

[1] Including Porto Rico.

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Cases of special diseases reported during the week ended Dec. 27, 1918.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Deaths.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
Beauregard	8	2	3	22	.....	.....	7	2	.....	1	963.8	34.6
Bowie	8	.....	.....	196	6	1	.....	.....	.....	.....	1,761.34	31.41
Cody	.....	.....	.....	6	.....	.....	3	.....	2	1	666.6	87.8
Forrest	.....	.....	.....	1	.....	1	24	.....	.....	1	1,014.83	53.7
Fremont	2	.....	.....	1	.....	.....	.....	.....	.....	2	547.3	52.04
Greene	5	.....	.....	39	.....	7	2	.....	.....	1	473.9	30.2
Greenleaf	3	.....	.....	2	.....	1	5	1	.....	4	604.4	35.5
Hancock	12	.....	1	44	4	2	13	1	1	3	520.9	43.4
Kearny	7	.....	.....	19	.....	26	1	.....	.....	1	348.99	16.59
Logan	5	.....	.....	6	1	41	13	1	.....	1	607.06	38.86
MacArthur	2	.....	.....	.....	.....	.....	4	1	.....	2	399.87	38.64
McClellan	32	.....	.....	5	.....	30	8	.....	.....	3	820.51	50.12
Sevier	2	.....	.....	14	3	17	6	1	.....	3	737.14	40.13
Shelby	7	.....	.....	23	12	25	4	.....	.....	1	1,329.2	70.9
Sheridan	5	.....	.....	21	3	.....	1	.....	.....	1	996.4	46.02
Wadsworth	3	.....	.....	8	1	.....	15	.....	.....	1	324.07	43.8
Wheeler	2	.....	.....	9	.....	.....	3	.....	.....	.....	1,369.4	172.6
Custer	8	.....	.....	18	5	.....	.....	.....	2	2	504.5	18.47
Devens	12	.....	.....	24	5	8	5	.....	.....	6	459.0	31.1
Dix	7	.....	.....	5	.....	21	2	.....	.....	1	714.78	45.15
Dodge	2	.....	.....	22	11	51	17	.....	3	1	1,256.8	49.2
Eustis	15	.....	.....	4	.....	13	2	.....	.....	4	357.23	10.82
Funston	18	.....	.....	10	.....	17	4	5	17	9	708.83	39.4
Gordon	9	.....	.....	18	.....	.....	1	.....	.....	5	775.7	50.4
Grant	9	.....	.....	3	.....	35	5	.....	.....	4	428.21	28.24
Humphreys	13	.....	.....	6	.....	38	2	.....	.....	8	602.85	25.43
Jackson	14	.....	.....	25	2	.....	11	1	.....	5	411.2	31.5
J. E. Johnston	4	.....	1	8	.....	.....	7	.....	.....	3	643.5	31.9
Las Casas	5	.....	25	.....	.....	14	.....	.....	.....	3	592.4	22.15
Lee	4	.....	.....	17	4	63	19	4	.....	4	673.7	48.3
Lewis	117	.....	.....	29	2	28	5	.....	6	4	1,067.3	51.4
Meade	15	1	.....	37	3	20	17	1	.....	6	677.4	25.6
Pike	8	.....	.....	13	.....	29	3	.....	1	10	1,152.2	50.5
Sherman	1	.....	.....	10	.....	4	5	.....	.....	6	500.3	44.5
Taylor	7	.....	.....	9	3	10	2	1	3	10	550.2	51.5
Travis	32	.....	.....	12	1	80	21	.....	1	11	2,034.49	61.76
Upton	8	.....	.....	24	.....	25	.....	.....	.....	7	505.1	34.6
Northeastern department	.....	.....	.....	8	5	16	2	1	2	3	792.25	37.45
Eastern department	6	.....	.....	11	2	53	1	.....	.....	6	416.7	19.34
Southeastern department	2	.....	.....	5	2	24	1	.....	.....	2	990.1	38.12
Southern department	15	.....	2	77	9	91	8	.....	.....	10	880.3	39.2
Central department	19	.....	.....	1	.....	21	.....	.....	1	1	1,694.61	39.14
Western department	1	.....	.....	7	3	42	.....	.....	1	5	772.97	27.09
Aviation camps	43	.....	.....	59	.....	102	7	.....	2	27	662.41	33.57
Port of embarkation:												
Hoboken	21	.....	1	56	2	160	9	1	.....	15	2,740.58	224.93
Newport News	2	.....	.....	81	.....	11	10	1	.....	4	2,840.74	99.91
Alcatraz, disciplinary barracks	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	936	12
Leavenworth, disciplinary barracks	1	.....	.....	.....	.....	.....	1	.....	3	.....	1,314.82	41.89
Jefferson Barracks	4	.....	.....	4	4	11	2	.....	.....	2	1,530.34	79.09
Columbus Barracks	.....	.....	.....	9	7	.....	.....	.....	.....	.....	2,023.6	78.5
Port Logan	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	682.03	45.13
Fort McDowell	1	.....	.....	3	3	.....	.....	.....	.....	.....	221.78	35.89
Fort Sam	2	.....	.....	25	25	42	.....	.....	.....	2	370.53	21.31
Fort Slocum	.....	.....	.....	3	.....	.....	.....	.....	.....	.....	229.58	20.75
Fort Thomas	1	.....	.....	1	1	.....	.....	.....	.....	1	509.3	46.3
West Point	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,419.9	27.3
Arsenals	8	.....	.....	10	1	12	1	.....	.....	2	630.95	31.47
Miscellaneous small stations	2	.....	.....	3	1	.....	8	.....	.....	.....	337.71	12.82
Students Army Training Corps	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
General hospitals	.....	.....	.....	.....	.....	.....	.....	.....	.....	44	.....	.....
Total	539	3	33	1,055	121	1,191	287	22	59	260	787.55	42.03

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Annual rate per 1,000 for special diseases.

Disease.	All troops in United States.[1]	Departmental and other troops.[1]	Divisional camps.[1]	Cantonments.[1]	Expeditionary forces.[2]
Pneumonia	26.44	17.54	26.71	33.37	30.68
Dysentery	.14	.....	.55	.10	1.45
Malaria	1.64	.41	1.10	2.81	.18
Venereal	52.44	48.53	115.74	30.88	26.65
Paratyphoid	.....	.....	.....	.....	.40
Typhoid	.....	.....	.....	.....	1.66
Measles	14.26	6.85	30.32	13.87	6.69
Meningitis	1.09	.41	1.94	1.30	2.92
Scarlet fever	2.48	1.23	.83	4.11	1.07
Influenza	59.20	80.20	41.73	49.41	.....

[1] Week ended Dec. 27, 1918. [2] Week ended Dec. 19, 1918.

Annual death rate (disease only): All troops in United States and A. E. F., France, for the week ending Dec. 19, 1918, 9.86.

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended January 4, 1919.

Alabama.—Influenza in State, 1,212 cases.

Arkansas.—Influenza: Leola 150 cases, 4 deaths; Scott 80 cases, 3 deaths; Lee 77, Conway County 79, Hempstead 86, Bradley 49, Texarkana (vicinity) 39, Halley 27, Stamps 30, Warren 26, Guion 25, Fayetteville 20, Izard 18, Garland 16, Pope 13, Dalark 12; also 30 others reported. Typhoid fever 5, smallpox 1, malaria 8, pellagra 1, tuberculosis 8, scarlet fever 1, diphtheria 1.

California.—Influenza: Reported during week 6,500 cases, still prevalent in most communities (total cases reported to date 240,800). Smallpox outbreak in vicinity of Watsonville, total 46 cases, 12 still under quarantine. Three smallpox Long Beach, 1 Sisson, 1 Kern County.

Connecticut.—Cerebrospinal meningitis, New Haven 1; influenza for State, 1,619.

Illinois.—Influenza recrudescence: Fall Creek Township (Adams County) 31, Palestine 23, De Kalb 42, Farina 93, Roberts 30, Newton 22, Yellowhead Township (Kankakee County) 24, Staunton 104, Virden 64, Sandoval 42, Odin 37, Normal 31, Putnam 36, Cowden 39, Alto Pass precinct (Union County) 38, Alto Pass 22, Dongola 16, Chicago 868. Diphtheria 177, of which in Chicago 136; scarlet fever 39, of which in Chicago 27; smallpox 39, of which in Schram City 19, Elgin 12; influenza 3,004; poliomyelitis 1; meningitis 1 each Joliet and Chicago; gonorrhea 1 each Quincy, Mattoon, Moline, Belleville, 7 Chicago; syphilis 76, of which in Chicago 39.

Indiana.—Influenza 572; syphilis 27; gonorrhea 21; diphtheria Rush County 1, Marshall 2, Wabash 1, Randolph 1, Blackford 1, Tippecanoe 5, Vigo 1, Laporte 3, Posey 1.

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Iowa.—Cerebrospinal meningitis, Greene 2; chancroid, Council Bluffs 1, Des Moines 3, Sioux City 1; diphtheria, Britt 1, Council Bluffs 1, Des Moines 5; gonorrhea, Alton 1, Boone 2, Cambridge 1, Cedar Rapids 1, Council Bluffs 10, Des Moines 130, Dubuque 2, Granville 1, Lovilia 2, Mason City 3, Newton 3, Sioux City 21; scarlet fever, Des Moines 7, Eagle Grove 1; smallpox, Burlington 1, Cedar Rapids 4, Council Bluffs 9, Des Moines 1, Dubuque 3, Mason City 1, Ottumwa 1; syphilis, Des Moines 51, Dubuque 3, Greene 1, Remsen 1, Sioux City 2. In rural districts of following counties: Diphtheria, Mills 1; gonorrhea, Monroe 2, Polk 1, Story 1; mumps, Polk 1; scarlet fever, Adair 1, Keokuk 1, Linn 1, Mills 1, Sioux 1, Union 2, Wayne 1; smallpox, Mills 2; influenza for State 1,653.

Kansas.—Meningitis by cities: Andover 1, Centralia 1, Junction City (carriers) 2. State totals: Typhoid fever 4, smallpox 11, diphtheria 25, scarlet fever 15, influenza 4,139. Influenza by cities: Atchison 5, Coffeyville 72, Hutchinson 27, Independence 162, Kansas City 31, Lawrence 95, Parsons 16, Pittsburg 47, Topeka 70, Wichita 108. Many delayed reports in this week's summary.

Louisiana.—Influenza 3,497, typhoid fever 4, diphtheria 4, smallpox 7, meningitis 2.

Maine.—Cerebrospinal meningitis, Lewiston 3 deaths; chicken pox, York 1; diphtheria, Portland 1, Bangor 2, Waterville 3; gonorrhea, Bath 5, Lewiston 2, Greenville 2, East Millinocket 3, Phillips 1, Fairfield 1, Biddeford 1, Portland 1, Waterville 1; measles, Milo 1; scarlet fever, Bath 4, Waldoboro 4, Portland 24, Dexter 1, Waterville 2; smallpox, Wallgrass Plantation 2, Lewiston 2, Fort Kent 2, Van Buren 1; syphilis, Lewiston 2, Auburn 1, Augusta 1, Portland 9, Bangor 1, Freeport 1, Saco 1; tuberculosis, 8 cases; typhoid fever, Bath 2, Augusta 1; whooping cough, Gardiner 1; influenza, Greenwood 62, Waterville 707 (for December), Gray 33, Portland 170, Rockport 33, Franklin 62, Bath 118, Dover 32, Friendship 27, Waldoboro 67, Bangor 105, Bucksport 63, Dixfield 117, Emden 20, Lewiston 196 (for December), Prospect 26, Willimantic 40, Auburn 43, Bridgeton 28, Thomaston 17, Westbrook 60, Greenville 39, Skowhegan 16; scattered cases 27.

Massachusetts.—Unusual prevalence; 14,793 cases influenza.

Michigan.—Influenza, Bay City 66 cases, 5 deaths; Battle Creek 70 cases, 7 deaths; Flint 34 cases; Lansing 335 cases; Jackson 61 cases; Kalamazoo 40 cases; Grand Rapids 404 cases, 13 deaths; Pontiac 60 cases; Saginaw 103 cases, 9 deaths; Detroit 743 cases, 143 deaths; total for State 7,431 cases, 280 deaths.

Minnesota.—Smallpox, new foci: Anoka County, Columbia Heights Village 1; Noble County, Adrian Village 1; Renville County, Fairfax Village 1. One cerebrospinal meningitis reported since December 13. Syphilis 40, gonorrhea 66.

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New Jersey.—Influenza, 3,605 cases; pneumonia, 355 cases. Reported from every county in the State. Diphtheria unusually prevalent in Salem City.

New York.—Outside of New York City: Diphtheria, 202, of which in Portland 16, Buffalo 55; measles, 102; scarlet fever, 116; smallpox, Buffalo 1; typhoid fever, 12, slight decrease; poliomyelitis, Saratoga Springs 1; pneumonia, 220; voluntary reports, syphilis 60, gonorrhea 9.

North Carolina.—Influenza by counties: Burke 150, Carteret 76, Chatham 2, Clay 4, Cleveland 250, Davidson 224, Durham 62, Gaston 45, Johnston 87, Montgomery 117, New Hanover 4, Pitt 276, Rockingham 50, Swain 200; cities reporting: Charlotte 8, Durham 90, Raleigh 80, Wilmington 22. Whooping cough 60, measles 27, diphtheria 23, scarlet fever 16, septic sore throat 3, smallpox 13, chicken pox 20, typhoid fever 13, meningitis 4, bacillary dysentery 3, broncho pneumonia 39, lobar pneumonia 19.

Ohio.—Scarlet fever, Pleasant Township (Franklin County) 6 cases; typhoid fever, Taylor Township (Union County) 5 cases.

Oregon.—Influenza, Portland 993 cases, 44 deaths; Benton 11, Clackamas 74, Columbia 27, Coos, 1 death; Deschutes 4, Douglas 40, Gilliam 4, Grant 28, and (1 death); Hood River 37, Jackson 4, Lincoln 3, Linn 37, Marion 205, Multnomah 72, Polk 2, Wasco 111, Washington 37.

Vermont.—Influenza, 1,245 cases from 9 towns.

Virginia.—One case smallpox Bedford County; 914 cases influenza.

Washington.—No unusual outbreak of disease; influenza situation improving very slowly.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Greene zone, N. C.	1	Camp Merritt zone, N. J.	1
Camp Hancock zone, Ga.	2	Picric Acid Plant zone, Ga.	1

State Reports for November, 1918.

Place	New cases reported.	Place.	New cases reported.
Alabama:		Virginia—Continued.	
Calhoun County	2	Pittsylvania County	1
Talladega County	1	Prince George County	3
Total	3	Rockbridge County—Buena Vista	1
Indiana:		Scott County	1
Grant County	1	Southampton County	1
Virginia:		Wise County	1
Albemarle County—Charlottesville	1	Total	13
Alleghany County—Covington	1	West Virginia:	
Buchanan County	1	Putnam County	3
Campbell County	1	Hancock County	1
Lee County	1	Kanawha County	1
		Total	5

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CEREBROSPINAL MENINGITIS—Continued.

City Reports for Week Ended Dec. 21, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Ashtabula, Ohio		2	Hudson, N. Y.		1
Baltimore, Md.	3	1	Kansas City, Mo.	1	
Boston, Mass.	1	1	Memphis, Tenn.	1	
Cambridge, Mass.	2	1	Milwaukee, Wis.	2	2
Charleston, W. Va.		1	Nashville, Tenn.	1	1
Chester, Pa.	1		New Haven, Conn.	1	
Chicago, Ill.	1	1	New Orleans, La.	1	2
Cleveland, Ohio	1		New York, N. Y.	5	1
Columbia, S. C.	1		St. Louis, Mo.		1
Columbus, Ohio	1		Salem, Mass.		1
Fall River, Mass.		1	San Antonio, Tex.	1	1
Fond du Lac, Wis.		1	Tuscaloosa, Ala.		1
Haverhill, Mass.	1	1	Wilmington, Del.	3	2
Holland, Mich.		1	Winthrop, Mass.	1	

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Greene zone, N. C.	3	Portsmouth and Norfolk County health district, Va.	1
Camp Joseph E. Johnston zone, Fla.	3	Camp Zachary Taylor zone, Ky. and Ind.	1
Camp Logan zone, Tex.	2	Camp Travis zone, Tex.	3
Camp Pike zone, Ark.	1		

DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex.	1	Camp Merritt zone, N. J.	1
Charleston sanitary district, S. C.	2	Fort Oglethorpe zone, Ga. and Tenn.	1
Camp Dix zone, N. J.	2	Camp Pike zone, Ark.	1
Camp Dodge zone, Iowa.	4	Portsmouth and Norfolk County health district, Va.	3
Camp Eberts zone, Ark.	1	Camp Sherman zone, Ohio	1
Gas and Flame School zone, Ga. and Ala.	1	Camp Zachary Taylor zone, Ky. and Ind.	7
Gulfport health district, Miss.	1	Camp Wheeler zone, Ga.	1
Fort Leavenworth zone, Kans.	2		
Camp Lee zone, Va.	2		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 59.

ERYSIPELAS.

City Reports for Week Ended Dec. 21, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Chicago, Ill.	10	2	Newark, N. J.	3	
Cincinnati, Ohio	2		New Haven, Conn.	1	
Dallas, Tex.		2	New Orleans, La.		1
Denver, Colo.	1		New York, N. Y.		3
Detroit, Mich.	5		Oswego, N. Y.	1	
East Orange, N. J.	1		Passaic, N. J.	1	
Highland Park, Mich.	2		Philadelphia, Pa.	6	
Los Angeles, Cal.	3	1	Providence, R. I.		1
Melrose, Mass.	1		St. Louis, Mo.	3	
Milwaukee, Wis.	1		Tuscaloosa, Ala.	1	
Minneapolis, Minn.	1		Wichita, Kans.	1	

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GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Beauregard zone, La	4	Camp MacArthur zone, Tex	2
Camp Bowie zone, Tex	5	Camp McClellan zone, Ala	2
Camp Doniphan zone, Okla	4	Camp Merritt zone, N. J	2
Camp Eberts zone, Ark	1	Camp Pike zone, Ark	20
Camp Funston zone, Kans	1	Portsmouth and Norfolk County health district, Va	6
Camp Gordon zone, Ga	40	Portsmouth-Kittery sanitary district, N. H. and Me	2
Camp Greene zone, N. C	7	Camp Sheridan zone, Ala	9
Gulfport health district, Miss	6	Camp Sherman zone, Ohio	4
Camp Hancock zone, Ga	2	Camp Zachary Taylor zone, Ky. and Ind	30
Camp Jackson zone, S. C	1	Tidewater health district, Va	1
Camp Joseph E. Johnston zone, Fla	21	Camp Travis zone, Tex	19
Fort Leavenworth zone, Kans	1		
Camp Logan zone, Tex	8		

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Beauregard zone, La	174	Camp Logan zone, Tex	5
Camp Bowie zone, Tex	9	Camp MacArthur zone, Tex	2
Bremerton zone, Wash	1	Camp McClellan zone, Ala	6
Charleston sanitary district, S. C	106	Camp Merritt zone, N. J	105
Camp Devens zone, Mass	71	Fort Oglethorpe zone, Ga. and Tenn	61
Camp Dix zone, N. J	25	Pensacola sanitary district, Fla	46
Camp Dodge zone, Iowa	13	Picric Acid Plant zone, Ga	10
Camp Doniphan zone, Okla	12	Camp Pike zone, Ark	132
Camp Eberts zone, Ark	88	Camp Polk zone, N. C	249
Camp Funston zone, Kans	36	Portsmouth and Norfolk County health district, Va	155
Gas and Flame School zone, Ga. and Ala	89	Portsmouth-Kittery sanitary district, N. H. and Me	58
Gerstner Field zone, La	82	Camp Sevier zone, S. C	141
Camp Gordon zone, Ga	52	Camp Sherman zone, Ohio	26
Camp Greene zone, N. C	62	Camp Zachary Taylor zone, Ky. and Ind	237
Gulfport health district, Miss	585	Tidewater health district, Va	151
Camp Hancock zone, Ga	188	Camp Travis zone, Tex	106
Camp Humphreys zone, Va	16	Vancouver zone, Wash	41
Camp Jackson zone, S. C	45	Camp Wadsworth zone, S. C	38
Camp Joseph E. Johnston zone, Fla	15	Camp Wheeler zone, Ga	27
Fort Leavenworth zone, Kans	27	Wilmington sanitary district, N. C	34
Camp Lee zone, Va	465		
Camp Lewis zone, Wash	18		

LEPROSY.

City Reports for Week Ended Dec. 21, 1918.

Two cases of leprosy were reported during the week ended December 21, 1918; one at Los Angeles, Cal., and one at New Orleans, La.

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Eberts zone, Ark	1	Camp Pike zone, Ark	2
Gulfport health district, Miss	4		

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MALARIA—Continued.

State Reports for November, 1918.

Places.	New cases reported.
Alabama:	
Bullock County	1
Choctaw County	1
Colbert County	8
Greene County	2
Jefferson County	1
Lamar County	2
Lowndes County	50
Mobile County	2
Monroe County	1
Shelby County	1
Tuscaloosa County	14
Total	83
Virginia:	
Accomac County	3
Brunswick County	9
Lawrenceville	1
Caroline County	5
Charles City County	1
Chesterfield County	2
Cumberland County	1
Dinwiddie County	6
Essex County	2
Fluvanna County	1
Greensville County	13
Emporia	9
Halifax County—	
South Boston	9
Virginia—Continued.	
Hanover County	1
Isle of Wight County	16
James City County—	
Toano	6
Middlesex County	11
New Kent County	4
Northampton County	6
Northumberland County	5
Nottoway County	3
Prince Edward County	1
Pittsylvania County	5
Powhatan County	7
Princess Anne County	20
Prince George County	4
Prince William County—	
Quantico	3
Richmond County	5
Rockingham County—	
Dayton	1
Southampton County	8
Sussex County	7
Stony Creek	4
Warwick County	4
Westmoreland County	4
Total	184

City Reports for Week Ended Dec. 21, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
McAlester, Okla	10	.....	Tuscaloosa, Ala	2	.....
Meridian, Miss	2	.....	Wilmington, Del	1	1
Newark, N. J	1	.....			

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Beauregard zone, La	1	Camp Pike zone, Ark	12
Camp Bowie zone, Tex	1	Camp Polk zone, N. C	1
Camp Funston zone, Kans	1	Portsmouth and Norfolk County health district, Va	2
Gas and Flame School zone, Ga. and Ala	5	Camp Zachary Taylor zone, Ky. and Ind	3
Camp Gordon zone, Ga	1	Tidewater health district, Va	5
Camp Jackson zone, S. C	1	Camp Travis zone, Tex	1
Camp Joseph E. Johnston zone, Fla	43	Camp Wadsworth zone, S. C	1
Camp Lee zone, Va	4	Camp Wheeler zone, Ga	4
Fort Oglethorpe zone, Ga. and Tenn	2	Wilmington sanitary district, N. C	1
Picric Acid Plant zone, Ga	10		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 59.

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PELLAGRA.

State Reports for November, 1918.

Place.	New cases reported.
Alabama:	
Bibb County	1
Butler County	1
Chambers County	1
Choctaw County	2
Clarke County	1
Clay County	2
Colbert County	1
Dallas County	1
Hale County	2
Jackson County	3
Jefferson County	12
Lawrence County	1
Limestone County	1
Macon County	1
Mobile County	10
Montgomery County	2
Pike County	1
Shelby County	1
Talladega County	3
Tallapoosa County	1
Tuscaloosa County	18
Total	66
Kansas:	
Cowley County—	
Atlanta	1
Montgomery County—	
Independence	1
Total	2
Virginia:	
Albemarle County	1
Dinwiddie County	1
Powhatan County	1
Washington County	3
Total	6
West Virginia:	
Kanawha County	1

City Reports for Week Ended Dec. 21, 1918.

Place.	Cases.	Deaths.
Atlanta, Ga.		3
Austin, Tex.	1	1
Charleston, S. C.		1
Danville, Va.	2	
Fort Dodge, Iowa		2
Long Beach, Cal.	1	1
Wilmington, N. C.		1

PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.
Camp Bowie zone, Tex.	36
Camp Devens zone, Mass.	3
Camp Doniphan zone, Okla.	1
Camp Eberts zone, Ark.	1
Camp Funston zone, Kans.	3
Gas and Flame School zone, Ga. and Ala.	7
Gerstner Field zone, La.	5
Camp Gordon zone, Ga.	3
Gulfport health district, Miss.	30
Camp Humphreys zone, Va.	1
Camp Jackson zone, S. C.	3
Camp Joseph E. Johnston zone, Fla.	2
Camp Lee zone, Va.	19
Camp MacArthur zone, Tex.	3
Camp McClellan zone, Ala.	1
Camp Merritt zone, N. J.	9
Pensacola sanitary district, Fla.	1
Picric Acid Plant zone, Ga.	1
Camp Pike zone, Ark.	11
Camp Polk zone, N. C.	1
Portsmouth and Norfolk County health district, Va.	3
Camp Sevier zone, S. C.	4
Camp Zachary Taylor zone, Ky. and Ind.	1
Tidewater health district, Va.	1
Camp Travis zone, Tex.	8
Camp Upton zone, N. Y.	1
Camp Wadsworth zone, S. C.	1
Wilmington sanitary district, N. C.	2

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PNEUMONIA—Continued.

City Reports for Week Ended Dec. 21, 1918.

Place.	Cases.	Deaths.
Abilene, Tex	4	.....
Adrian, Mich	1	.....
Anniston, Ala	8	.....
Arlington, Mass	1	1
Atlantic City, N. J	2	7
Attleboro, Mass	2	1
Auburn, N. Y	6	1
Baltimore, Md	25	35
Battle Creek, Mich	6	.....
Beacon, N. Y	2	.....
Belleville, N. J	2	.....
Berkeley, Cal	1	.....
Beverly, Mass	1	1
Binghamton, N. Y	6	.....
Bloomfield, N. J	2	1
Boston, Mass	78	33
Brunswick, Ga	7	4
Cambridge, Mass	4	6
Centralia, Ill	25	5
Chelsea, Mass	2	4
Chicago, Ill	916	159
Chillicothe, Ohio	1	.....
Cleveland, Ohio	89	73
Coffeyville, Kans	1	1
Columbia, S. C	1	.....
Columbus, Ga	10	4
Concord, N. H	2	.....
Corning, N. Y	2	.....
Cranston, R. I	2	2
Dayton, Ohio	11	10
Detroit, Mich	73	95
Duluth, Minn	5	3
East Orange, N. J	7	10
Elmira, N. Y	5	8
Escanaba, Mich	20	8
Everett, Wash	8	.....
Fall River, Mass	5	2
Findlay, Ohio	1	1
Flint, Mich	7	18
Fort Worth, Tex	70	24
Freeport, Ill	3	.....
Gardner, Mass	7	2
Grand Rapids, Mich	63	14
Green Bay, Wis	1	.....
Greenwich, Conn	1	5
Hackensack, N. J	6	4
Harrison, N. J	1	.....
Haverhill, Mass	15	6
Helena, Ark	4	4
Highland Park, Mich	21	3
Hoquiam, Wash	9	.....
Independence, Mo	5	3
Ithaca, N. Y	2	.....
Jackson, Mich	9	6
Jamestown, N. Y	4	5
Jersey City, N. J	9	.....
Kalamazoo, Mich	28	14
Kansas City, Kans	11	.....
Kansas City, Mo	38	43
Kearny, N. J	9	2
Lackawanna, N. Y	9	5
Lawrence, Mass	2	2
Leavenworth, Kans	1	8
Lincoln, Nebr	3	3
Little Rock, Ark	16	5
Los Angeles, Cal	13	11
Louisville, Ky	4	38
Lowell, Mass	2	2
Lynn, Mass	10	6
McAlester, Okla	8	2
Malden, Mass	7	1
Manchester, N. H	1	1
Manistee, Mich	2	1
Mansfield, Ohio	2	.....
Marion, Ohio	4	.....
Medford, Mass	1	1
Melrose, Mass	2	1
Meridian, Miss	1	.....
Middletown, N. Y	1	3
Montclair, N. J	2	5
Montgomery, Ala	3	7
Morgantown, W. Va	2	.....
Mount Vernon, N. Y	7	.....
Muncie, Ind	3	2
Natick, Mass	13	10
Newark, N. J	126	31
New Bedford, Mass	9	2
New Britain, Conn	1	7
Newcastle, Ind	4	1
New London, Conn	2	.....
Newton, Mass	1	1
New York, N. Y	485	318
North Adams, Mass	1	1
Northampton, Mass	2	2
North Tonawanda, N. Y	4	.....
Norwich, Conn	1	1
Norwood, Ohio	3	4
Ossining, N. Y	2	.....
Palestine, Tex	16	3
Parkersburg, W. Va	1	1
Passaic, N. J	10	3
Philadelphia, Pa	24	90
Piqua, Ohio	4	2
Pontiac, Mich	5	1
Port Chester, N. Y	3	2
Portsmouth, N. H	2	.....
Quincy, Ill	8	7
Richmond, Va	5	17
Riverside, Cal	2	6
Roanoke, Va	2	.....
Rochester, N. Y	37	11
Rome, N. Y	6	.....
Saginaw, Mich	1	27
Salem, Mass	7	1
San Antonio, Tex	30	21
San Diego, Cal	1	6
Sandusky, Ohio	21	12
Sault Ste. Marie, Mich	1	.....
Schenectady, N. Y	6	1
Sioux Falls, S. Dak	3	1
Somerville, Mass	3	3
Springfield, Mass	35	21
Toledo, Ohio	3	15
Trenton, N. J	2	3
Waco, Tex	3	3
Watertown, Mass	2	.....
Westfield, Mass	3	3
West Orange, N. J	3	2
Wichita, Kans	1	.....
Wilmington, Del	5	5
Wilmington, N. C	2	2
Worcester, Mass	25	.....
Yonkers, N. Y	4	1
Youngstown, Ohio	1	1

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POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for November, 1918.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Virginia—Continued.	
Limestone County	2	Princess Anne County	1
Indiana:		Shenandoah County	1
Marion County	1	Tazewell County	1
Kansas:		Total	5
Geary County—		West Virginia:	
Junction City	1	Jackson County	1
Virginia:		Kanawha County	1
James City County	1	Total	2
Lee County	1		

City Reports for Week Ended Dec. 21, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Nashville, Tenn		1	Newton, Mass	1	
New Orleans, La	1		Philadelphia, Pa		1

RABIES IN ANIMALS.

City Reports for Week Ended Dec. 21, 1918.

During the week ended December 21, 1918, 2 cases of rabies in animals were reported at Memphis, Tenn., and 3 cases at San Antonio, Tex.

RABIES IN MAN.

City Report for Week Ended Dec. 21, 1918.

During the week ended December 21, 1918, 1 case and 1 death from rabies were reported at San Antonio, Tex.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Bremerton zone, Wash	2	Fort Oglethorpe zone, Ga. and Tenn	1
Camp Devens zone, Mass	1	Camp Pike zone, Ark	1
Camp Dodge zone, Iowa	5	Camp Polk zone, N. C	4
Camp Funston zone, Kans	3	Camp Sheridan zone, Ala	1
Camp Gordon zone, Ga	2	Camp Sherman zone, Ohio	1
Camp Greene zone, N. C	1	Camp Zachary Taylor zone, Ky. and Ind	1
Camp Humphreys zone, Va	1	Tidewater health district, Va	1
Camp Joseph E. Johnston zone, Fla	1	Camp Wheeler zone, Ga	1
Camp Merritt zone, N. J	1	Wilmington sanitary district, N. C	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, p. 59.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	1	Camp Gordon zone, Ga	19
Gas and Flame School zone, Ga. and Ala	4	Camp Polk zone, N. C	2
Gerstner Field zone, La	15		

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SMALLPOX—Continued.

Kansas Report for November, 1918—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Kansas:						
Anderson County—						
Welda (R. D.)	1				1	
Comanche County—						
Wilmore (R. D.)	6				6	
Cowley County—						
Winfield	2				2	
Crawford County—						
Pittsburg	4				4	
Douglas County—						
Lawrence	2				2	
Franklin County—						
Richmond	2				2	
Jewell County—						
Esbon (R. D.)	1				1	
Sedgwick County—						
Wichita	12				12	
Seward County—						
Liberal	2				2	
Sherman County—						
Goodland	1				1	
Stanton County—						
Johnson (R. D.)	2				2	
Sumner County—						
South Haven (R. D.)	10				10	
Woodson County—						
Neosho Falls	1				1	
Wyandotte County—						
Kansas City	2				2	
Total	48				48	

State Reports for November, 1918.

Place.	Cases.	Deaths.
Alabama:		
Bibb County	3	
Colbert County	4	
Jefferson County	4	
Lauderdale County	4	
Lee County	1	
Limestone County	1	1
Mobile County	1	
Washington County	4	
Total	22	1
Indiana:		
Allen County	5	
Cass County	2	
Clark County	8	
Clinton County	1	
Dearborn County	9	
Delaware County	11	
Fountain County	9	
Kosciusko County	1	
La Porte County	24	
Marion County	2	
Marshall County	9	
Miami County	2	
Parke County	4	
Porter County	39	
Rush County	41	
Shelby County	1	
St. Joseph County	6	
Sullivan County	1	
Tippecanoe County	2	
Vigo County	7	
Wayne County	1	
Wells County	6	
Total	191	

Place.	Cases.	Deaths.
Virginia:		
Alleghany County	11	
Covington	10	
Bedford County	1	
Campbell County	13	
Carroll County	12	
Craig County	1	
Grayson County	6	
Halifax County	1	
Isle of Wight County	1	
King William County	3	
Norfolk County	2	
Pittsylvania County	10	
Prince George County	1	
Rockingham County	2	
Harrisonburg	1	
Tazewell County—		
Pocahontas	1	
Total	76	
West Virginia:		
Berkeley County	1	
Kanawha County	1	
McDowell County	7	
Putnam County	1	
Raleigh County	2	
Randolph County	5	
Roane County	2	
Wyoming County	12	
Total	31	

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SMALLPOX—Continued.

City Reports for Week Ended Dec. 21, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Adrian, Mich	17		Memphis, Tenn	1	
Anderson, Ind	1		Milwaukee, Wis	8	
Atlanta, Ga	13		Minneapolis, Minn	6	
Austin, Tex	1		Muncie, Ind	4	
Beaumont, Tex	2	1	Muscatine, Iowa	1	
Cincinnati, Ohio	1		Nashville, Tenn	1	
Cleveland, Ohio	7		Newcastle, Ind	1	
Columbus, Ga	4		North Yakima, Wash	6	
Corpus Christi, Tex	3		Ogden, Utah	7	
Council Bluffs, Iowa	1		Oklahoma City, Okla	1	
Danville, Va	3		Omaha, Nebr	2	
Denver, Colo	20		Oswego, N. Y	1	
Des Moines, Iowa	1		Pekin, Ill	2	
Detroit, Mich	3		Peoria, Ill	2	
Elgin, Ill	18		Portland, Oreg	1	
Escanaba, Mich	1		Raleigh, N. C	1	
Grand Rapids, Mich	2		St. Joseph, Mo	4	
Greenville, S. C	3		St. Louis, Mo	2	
Jackson, Mich	1		St. Paul, Minn	25	
Kansas City, Kans	2		Salt Lake City, Utah	3	
Kansas City, Mo	3		Sioux Falls, S. Dak	1	
Knoxville, Tenn	1		South Bend, Ind	1	
Lincoln, Nebr	1		Tacoma, Wash	7	
Lorain, Ohio	4		Toledo, Ohio	7	
Los Angeles, Cal	3		Winston-Salem, N. C	2	
Marinette, Wis	5		Zanesville, Ohio	4	
Marshalltown, Iowa	4				

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	1	Camp Pike zone, Ark	14
Camp Gordon zone, Ga	21	Portsmouth and Norfolk County health district, Va	3
Camp Greene zone, N. C	8	Camp Sheridan zone, Ala	5
Camp Hancock zone, Ga	19	Camp Sherman zone, Ohio	1
Camp Jackson zone, S. C	15	Camp Zachary Taylor zone, Ky. and Ind	25
Camp Joseph E. Johnston zone, Fla	35	Tidewater health district, Va	1
Camp Logan zone, Tex	32	Camp Travis zone, Tex	5
Camp MacArthur zone, Tex	1		
Camp McClellan zone, Ala	3		

TETANUS.

City Reports for Week Ended Dec. 21, 1918.

During the week ended December 21, 1918, 1 death from tetanus was reported at Malden, Mass., and 1 case was reported at Ossining, N. Y.

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	3	Camp Polk zone, N. C	2
Gas and Flame School zone, Ga. and Ala	1	Camp Sevier zone, S. C	1
Camp Gordon zone, Ga	1	Camp Sheridan zone, Ala	1
Camp Joseph E. Johnston zone, Fla	4	Camp Zachary Taylor zone, Ky. and Ind	7
Camp Lee zone, Va	3	Tidewater health district, Va	2
Camp MacArthur zone, Tex	3	Camp Travis zone, Tex	7
Pensacola sanitary district, Fla	1	Wilmington sanitary district, N. C	2

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 59.

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TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 4, 1919.

	Cases.		Cases.
Camp Jackson zone, S. C.	1	Camp Travis zone, Tex.	2
Camp Polk zone, N. C.	1	Wilmington sanitary district, N. C.	3
Camp Sherman zone, Ohio.	1		

State Reports for November, 1918.

Place.	New cases reported.
Alabama:	
Barbour County	4
Bibb County	1
Bullock County	2
Colbert County	2
Hale County	1
Henry County	1
Houston County	3
Jefferson County	4
Lamar County	3
Lauderdale County	1
Limestone County	1
Marshall County	1
Monroe County	2
Montgomery County	5
Pickens County	1
Pike County	1
Randolph County	2
Shelby County	7
St. Clair County	1
Talladega County	3
Tuscaloosa County	1
Wilcox County	1
Winston County	3
Total	50
Arizona:	
Maricopa County—	
Phoenix	1
Indiana:	
Allen County	8
Bartholomew County	1
Cass County	4
Clark County	13
Clay County	4
Dearborn County	1
Dekalb County	1
Floyd County	1
Fountain County	1
Grant County	2
Greene County	1
Howard County	2
Huntington County	3
Jay County	1
Jennings County	1
Johnson County	4
Kosciusko County	2
Lawrence County	1
Marion County	1
Putnam County	1
St. Joseph County	1
Switzerland County	3
Wabash County	5
Washington County	2
White County	1
Total	65
Kansas:	
Anderson County—	
Garnett	1
Barton County—	
Hoisington	1
Bourbon County—	
Mapleton (R. D.)	3
Xenia	1
Butler County—	
Eldorado (R. D. 1)	7
Gill Hill	2
Kansas—Continued.	
Chautauqua County—	
Sedan	1
Cherokee County—	
Baxter Springs	1
Columbus (R. D.)	2
Cloud County—	
Lebo	1
Comanche County—	
Coldwater (R. D.)	1
Crawford County—	
Pittsburg	1
Dickinson County—	
Herington	2
Elk County—	
Moline (R. D.)	1
Finney County—	
Garden City	1
Franklin County—	
Ottawa (R. D.)	1
Gove County—	
Quinter	1
Harper County—	
Attica	1
Harvey County—	
Newton	5
Labette County—	
Chetopa (R. D. 1)	2
Mound Valley	1
Parsons	1
Leavenworth County—	
Bonner Springs (R. D.)	1
Linn County—	
La Cygne (R. D.)	3
Marshall County—	
Irving	1
McPherson County—	
Galva (R. D.)	1
Meade County—	
Fowler	1
Miami County—	
Osawatomie (R. D.)	2
Montgomery County—	
Caney	2
Coffeyville (R. D. 1)	4
Independence (R. D. 1)	12
Tyro	1
Nemaha County—	
Kelley	1
Pawnee County—	
Larned	1
Reno County—	
Hutchinson	1
Republic County—	
Belleville	1
Saline County—	
Culver	1
Saline	1
Sedgwick County—	
Valley Center	1
Wichita	3
Shawnee County—	
Topeka (R. D.)	4
Smith County—	
Lebanon	1
Thomas County—	
Levant (R. D.)	1
Wichita County—	
Marienthal (R. D.)	1

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TYPHOID FEVER—Continued.

State Reports for November, 1918—Continued.

Place.	New cases reported.
Kansas—Continued.	
Wilson County—	
Buffalo	1
Fredonia (R. D.)	1
New Albany	1
Wyandotte County—	
Kansas City	2
Total	88
Nevada:	
Clark County	1
Humboldt County	1
Nye County	4
Washoe County	2
White Pine County	2
Total	10
Virginia:	
Accomac County	2
Albemarle County—	
Charlottesville	2
Alleghany County	1
Clifton Forge	4
Amherst County	1
Appomattox County	3
Augusta County	2
Bedford County	1
Bedford	3
Campbell County—	
Lynchburg	2
Carroll County	2
Clarke County	1
Dickenson County	2
Elizabeth City County—	
Phoebus	1
Floyd County	1
Giles County	1
Grayson County	4
Hanover County	1
Henrico County	3
Richmond	2
Henry County	2
Lee County—	
Dryden	1
Louisa County	1
Mathews County	1
Mecklenburg County	1
Middlesex County	1
Montgomery County—	
Radford	1
Nansemond County—	
Suffolk	1
Norfolk County	1
Northumberland County	7
Powhatan County	1
Princess Anne County	1
Prince Edward County	3
Prince George County	3
Pulaski County	1
Richmond County	1
Rockbridge County—	
Buena Vista	1
Rockingham County	1
Russell County	1
Castlewood	1
Shenandoah County	2
Southampton County	2
Surry County	1
Tazewell County	1
Warwick County	2
Washington County	5
Meadow View	3
Westmoreland County	1
Wise County	4
Wythe County	4
York County	1
Total	96
West Virginia:	
Berkeley County	1
Jackson County	3
Kanawha County	17
Monongalia County	2
Ohio County	1
Pendleton County	4
Putnam County	4
Raleigh County	2
Randolph County	40
Wood County	2
Total	76

City Reports for Week Ended Dec. 21, 1918.

Place.	Cases.	Deaths.
Abilene, Tex	1	
Altoona, Pa	1	
Baltimore, Md	8	1
Boston, Mass	2	1
Buffalo, N. Y	2	
Charleston, W. Va		1
Chester, Pa	1	
Chicago, Ill	4	1
Chillicothe, Ohio	1	
Cleveland, Ohio	4	3
Columbia, S. C	1	
Dallas, Tex		1
Denver, Colo		2
Detroit, Mich		1
Elgin, Ill		1
Elmira, N. Y		1
Englewood, N. J	3	
Erie, Pa	1	
Fall River, Mass	1	1
Fort Worth, Tex	1	
Houston, Tex	3	
Jersey City, N. J	2	
Los Angeles, Cal	1	
McAlester, Okla	3	
Manistee, Mich		1
Memphis, Tenn	1	1
Meridian, Miss	1	
Minneapolis, Minn	1	
Moline, Ill	13	2
Natick, Mass	1	
Newark, N. J	1	1
New Haven, Conn	3	
Newton, Mass	1	
New York, N. Y	8	4
Orange, N. J	1	
Philadelphia, Pa	2	1
Pittsburgh, Pa	1	
Portland, Oreg	1	
Rahway, N. J	1	
Reading, Pa	2	
Rochester, N. Y		1
Sacramento, Cal		1
St. Louis, Mo	6	
Shamokin, Pa	1	
Superior, Wis		1
Syracuse, N. Y		1
Toledo, Ohio	1	
Trenton, N. J	1	
Waco, Tex	3	1
Wichita, Kans	2	
Wilkinsburg, Pa	1	
Wilmington, N. C	4	
Winston-Salem, N. C	1	

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for November, 1918.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
Alabama	56	51	25	Nevada	1	.....	.....
Arizona	2	.....	3	Virginia	199	46	49
Indiana	.....	44	163	West Virginia	41	9	24
Kansas	118	46	90				

City Reports for Week Ended Dec. 21, 1918.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Abilene, Tex.	14,954	4	2	.....	1	.....	2	.....	1	.....
Adams, Mass.	14,406	1	.....	.....	.....	.....	.....	.....	.....	.....
Akron, Ohio	93,604	42	2	.....	1	.....	2	.....	5	.....
Alameda, Cal.	28,433	12	1	.....	.....	.....	.....	.....	.....	.....
Allentown, Pa.	65,109	.....	8	.....	.....	.....	1	.....	2	.....
Altoona, Pa.	59,712	.....	12	.....	.....	.....	2	.....	.....	.....
Anderson, Ind.	24,230	13	.....	.....	.....	.....	.....	.....	.....	1
Ann Arbor, Mich.	15,041	10	.....	.....	.....	.....	.....	.....	.....	.....
Appleton, Wis.	18,005	4	.....	.....	.....	.....	.....	.....	.....	.....
Arlington, Mass.	13,073	10	.....	.....	.....	.....	.....	.....	.....	1
Asbury Park, N. J.	14,629	4	.....	.....	.....	.....	.....	.....	1	.....
Ashtabula, Ohio	22,008	10	.....	.....	.....	.....	.....	.....	.....	1
Atlanta, Ga.	196,144	80	3	.....	.....	.....	8	1	2	.....
Atlantic City, N. J.	59,515	24	.....	.....	.....	.....	1	.....	3	1
Attleboro, Mass.	19,776	8	.....	.....	.....	.....	.....	.....	.....	.....
Auburn, N. Y.	37,823	13	.....	.....	.....	.....	.....	.....	.....	1
Austin, Tex.	35,612	25	.....	.....	.....	.....	.....	.....	4	4
Baltimore, Md.	594,637	229	20	1	7	.....	16	.....	27	15
Barre, Vt.	12,401	2	.....	.....	.....	.....	.....	.....	.....	.....
Battle Creek, Mich.	39,159	4	6	.....	.....	.....	.....	.....	.....	.....
Bayonne, N. J.	72,204	.....	5	.....	.....	.....	.....	.....	2	.....
Beacon, N. Y.	11,674	3	.....	.....	.....	.....	.....	.....	.....	.....
Beaumont, Tex.	26,851	15	1	.....	.....	.....	.....	.....	1	3
Bedford, Ind.	10,613	5	.....	.....	.....	.....	.....	.....	.....	1
Beloit, Wis.	18,547	11	.....	.....	2	.....	.....	.....	2	.....
Benton Harbor, Mich.	11,099	5	2	.....	.....	.....	.....	.....	.....	.....
Berkeley, Cal.	60,427	15	2	.....	.....	.....	.....	.....	1	.....
Beverly, Mass.	22,128	7	3	.....	.....	.....	1	.....	.....	.....
Biddeford, Me.	17,760	2	.....	.....	.....	.....	.....	.....	.....	1
Billings, Mont.	15,123	.....	.....	.....	1	.....	1	.....	.....	.....
Binghamton, N. Y.	54,864	21	1	.....	.....	.....	1	.....	1	1
Bloomfield, N. J.	19,013	2	3	.....	.....	.....	.....	.....	1	1
Boise, Idaho	35,951	11	.....	.....	.....	.....	.....	.....	.....	.....
Boston, Mass.	767,813	334	49	7	10	.....	31	.....	59	27
Brazil, Ind.	10,472	4	1	.....	.....	.....	.....	.....	.....	.....
Bridgeport, Conn.	124,724	45	3	.....	1	.....	1	.....	3	4
Bristol, Conn.	16,318	5	.....	.....	.....	.....	1	.....	.....	.....
Brookline, Mass.	33,526	8	1	.....	.....	.....	1	.....	.....	2
Brunswick, Ga.	10,984	8	.....	.....	10	.....	.....	.....	3	1
Buffalo, N. Y.	475,781	175	53	5	14	.....	11	.....	5	11
Burlington, Iowa	25,144	17	.....	.....	.....	.....	.....	.....	1	.....
Burlington, Vt.	21,802	15	.....	.....	.....	.....	.....	.....	.....	.....
Butte, Mont.	44,057	.....	.....	.....	1	.....	2	.....	.....	.....
Cairo, Ill.	15,985	10	1	.....	.....	.....	.....	.....	.....	1
Cambridge, Mass.	114,293	54	3	.....	3	.....	2	.....	1	6
Carbondale, Pa.	19,597	.....	1	.....	.....	.....	.....	.....	3	.....
Carnegie, Pa.	11,963	.....	.....	.....	1	.....	.....	.....	.....	.....
Champaign, Ill.	15,052	7	.....	.....	.....	.....	.....	.....	.....	.....
Charleston, S. C.	61,041	30	3	.....	.....	.....	.....	.....	2	2
Charleston, W. Va.	31,060	16	1	.....	.....	.....	1	.....	1	2
Charlotte, N. C.	40,759	31	.....	.....	1	.....	.....	.....	.....	1
Chelsea, Mass.	48,405	.....	.....	.....	.....	.....	1	.....	1	1
Chester, Pa.	41,857	.....	2	.....	1	.....	.....	.....	1	.....
Chicago, Ill.	2,547,201	1,110	149	9	55	.....	29	.....	245	65
Chicopee, Mass.	29,950	7	5	1	.....	.....	.....	.....	.....	1

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 21, 1918—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Chillicothe, Ohio	15,625	1	2		7		1			
Cincinnati, Ohio	414,248	269	19	1	3		3	1	12	11
Cleveland, Ohio	692,250	425	29	2	3		10	1	28	20
Clinton, Iowa	27,678		1							
Clinton, Mass	[1]13,075	6					1			
Coffeyville, Kans	18,331						1			2
Cohoes, N. Y	25,292	8	1				4			
Colorado Springs, Colo	29,965	28					1			4
Columbia, S. C	35,165				3					
Columbus, Ga	26,306	9	1		5				1	1
Columbus, Ohio	220,135	114			1		4		6	9
Concord, N. H	22,858	13							1	
Connellsville, Pa	15,876						1		2	
Corpus Christi, Tex	10,789	3	1							
Cortland, N. Y	13,321	6							2	1
Council Bluffs, Iowa	31,838	24								
Covington, Ky	59,623	35	2				1			2
Cranston, R. I	26,773	5					1			
Dallas, Tex	129,738	82							1	7
Danville, Ill	32,969	15							1	1
Danville, Va	20,183	6							36	
Dayton, Ohio	128,939	76	1							
Denver, Colo	268,439	233			1		6			28
Des Moines, Iowa	101,052		3				2			
Detroit, Mich	619,648	401	90	15	3		46	1	19	24
Dover, N. H	13,276	3								
Du Bois, Pa	14,994		2							
Duluth, Minn	97,077	32	15							2
Durham, N. C	26,160	5	1							
East Chicago, Ind	30,286	12								
Easthampton, Mass	10,656								1	
East Orange, N. J	43,761	12	3				1		1	
East Providence, R. I	18,485		2							
Eau Claire, Wis	18,887				1		2			
Elgin, Ill	28,562	9								
Elmira, N. Y	38,272	19							2	2
El Paso, Tex	69,149	49	4	1	10					7
Elyria, Ohio	19,503	14								
Englewood, N. J	12,603	3								
Erie, Pa	76,502		2		1				2	
Escanaba, Mich	15,854	12								1
Evanston, Ill	29,304	19			2		2			
Everett, Mass	40,160	7	1				1		2	1
Everett, Wash	37,205		1							
Fairmont, W. Va	10,111		1							
Fall River, Mass	120,828	48	5		7				11	5
Fargo, N. Dak	17,872	8	1				1			
Farrell, Pa	[1]10,190		1							
Findlay, Ohio	[1]14,858	9								1
Flint, Mich	57,386	33	2	1						
Fond du Lac, Wis	21,186	11								
Fort Dodge, Iowa	21,039						2			
Fort Scott, Kans	10,564	6								
Fort Worth, Tex	109,507	53							2	2
Fostoria, Ohio	10,959	6	1							
Frederick, Md	11,225	11								
Freeport, Ill	19,844	5								
Fremont, Nebr	10,080	11								2
Galesburg, Ill	24,629	14								
Gardner, Mass	17,534		2						2	1
Geneva, N. Y	13,915						1			
Grand Rapids, Mich	132,861	63	3		2		2		2	1
Green Bay, Wis	30,017	11								1
Greenfield, Mass	12,251	9								
Greenville, S. C	18,574	5			1					
Greenwich, Conn	19,594						1			
Hackensack, N. J	17,412	14							1	
Hammond, Ind	27,016	11								1
Harrisburg, Pa	73,276		1				1			
Hartford, Conn	112,831	48	8	1	18		2		1	4
Haverhill, Mass	49,189	13	2				1		1	
Hazelton, Pa	28,781		2							

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 21, 1918—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Helena, Ark	11,122	4								
Henderson, Ky	12,312	7								3
Highland Park, Mich	33,859		2							
Hoboken, N. J	78,324	15	1				1		1	
Holland, Mich	12,459	3								
Holyoke, Mass	60,503	34								3
Houston, Tex	116,878	52	5	1			1		3	7
Hudson, N. Y	12,898	8								1
Independence, Mo	11,964	8								
Indianapolis, Ind	283,622	93	11		10		7		1	5
Ithaca, N. Y	16,017	6					4		2	1
Jackson, Mich	35,996	19	2				5			1
Jamestown, N. Y	37,431	16	3						2	
Janesville, Wis	14,411	8								
Jersey City, N. J	312,557		19		1		6		16	
Johnstown, N. Y	10,678	2							1	
Johnstown, Pa	70,473		7				1		3	
Kalamazoo, Mich	50,408	28	2				1		1	1
Kankakee, Ill	14,270		1							
Kansas City, Kans	102,006		3						1	
Kansas City, Mo	385,816	241	7		2		2			8
Kearny, N. J	24,325				1		4		2	1
Kenosha, Wis	32,833	7	1		1		2			1
Knoxville, Tenn	59,112		2	1			1		3	3
Kokomo, Ind	21,929	6					1			
Lackawanna, N. Y	16,219	16	6	1	14		2		2	1
La Crosse, Wis	31,835	21								1
La Fayette, Ind	21,481	16	3	1						1
Lancaster, Pa	51,437		5		3					
Lawrence, Kans	13,477	18								
Lawrence, Mass	102,923	35	1						3	1
Leavenworth, Kans	[1] 19,363	14	3				1			
Lincoln, Nebr	46,957	29	1				1			1
Little Rock, Ark	58,716	13	4				5		2	2
Logansport, Ind	21,338	14								1
Long Beach, Cal	29,163	17	6				1		1	1
Long Branch, N. J	15,733	6							1	
Lorain, Ohio	38,266	12	1				5			
Los Angeles, Cal	535,463	286	18	3	1		9		30	21
Louisville, Ky	240,808	116	5		2		1		7	4
Lowell, Mass	114,366	46	8	1	3		6		3	6
Lynchburg, Va	33,497	9							1	1
Lynn, Mass	101,534	67	6	1			1	1	4	4
McAlester, Okla	19,398	7	1	1						
Mahanoy City, Pa	17,709		1							
Malden, Mass	52,343		4				1			2
Manchester, Conn	15,859	3					3			
Manchester, N. H	79,607	24	4	2			1		6	1
Manistee, Mich	[1] 12,331	3								
Manitowoc, Wis	13,931	8	1							
Mansfield, Ohio	25,051								1	
Marinette, Wis	[1] 14,610	12	1				1			
Marshalltown, Iowa	14,519		1				1			
Martins Ferry, Ohio	10,125	2								1
Mason City, Iowa	14,998	9								
Massillon, Ohio	15,509	6								
Medford, Mass	26,481	11	3							
Melrose, Mass	17,724	9					1			
Memphis, Tenn	151,877	75	8		2		3		9	8
Meridian, Miss	21,824	8							2	
Middletown, Ohio	16,584	5								1
Milford, Mass	14,290	6								
Milwaukee, Wis	445,008	278	6	1	2	1	18	1	23	12
Minneapolis, Minn	373,448	180	19	2	1		2			4
Missoula, Mont	12,675	12								
Mobile, Ala	59,201	29	1				1			1
Moline, Ill	27,976	18	1				1			3
Monessen, Pa	23,070		5							
Montclair, N. J	27,987	5	1							
Montgomery, Ala	44,039	23					2			1
Morgantown, W. Va	14,444	7	3							

[1] Population Apr. 15, 1918.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 21, 1918—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Mountsville, W. Va	11,513	19	.....	.....	.....	.....	.....	1	.....	.....
Mount Carmel, Pa	20,709	.....	.....	.....	.....	.....	.....	.....	2	.....
Mount Vernon, N. Y	37,991	8	2	.....	.....	.....	.....	.....	1	1
Muncie, Ind	25,653	10	.....	.....	.....	.....	.....	.....	4	1
Nanticoke, Pa	23,811	.....	2	.....	1	.....	1	.....	.....	.....
Nashua, N. H	27,541	7	.....	.....	.....	.....	1	.....	.....	.....
Nashville, Tenn	118,136	53	3	.....	1	1	1	.....	1	2
Natick, Mass	10,140	22	.....	.....	.....	.....	.....	.....	1	1
Newark, N. J	418,789	196	31	2	.....	.....	8	.....	16	22
New Bedford, Mass	121,622	32	3	1	1	.....	2	.....	11	1
New Britain, Conn	55,385	23	1	2	3	.....	2	.....	.....	.....
Newburgh, N. Y	29,893	14	.....	.....	.....	.....	1	.....	1	.....
Newburyport, Mass	15,291	5	.....	.....	.....	.....	.....	.....	.....	1
New Castle, Ind	11,144	4	.....	.....	.....	.....	.....	.....	.....	.....
New Haven, Conn	152,275	89	13	1	5	.....	1	.....	5	3
New London, Conn	21,199	13	5	.....	.....	.....	1	.....	.....	.....
New Orleans, La	377,010	190	1	.....	.....	.....	.....	.....	40	29
Newport, Ky	32,133	11	.....	.....	.....	.....	.....	.....	.....	.....
Newport, R. I	30,585	11	.....	.....	.....	.....	2	.....	.....	.....
Newton, Mass	44,345	15	3	1	.....	.....	1	.....	3	1
New York, N. Y	5,737,492	1,707	259	23	18	.....	98	.....	211	155
Niagara Falls, N. Y	38,466	.....	1	.....	.....	.....	.....	.....	1	.....
North Adams, Mass	[1] 22,019	4	.....	.....	.....	.....	.....	.....	2	.....
Northampton, Mass	20,006	18	1	.....	.....	.....	2	.....	.....	2
North Attleboro, Mass	11,248	4	.....	.....	.....	.....	.....	.....	.....	1
North Tonawanda, N. Y	14,000	6	1	.....	.....	.....	.....	.....	.....	.....
Norwich, Conn	21,923	2	.....	.....	.....	.....	.....	.....	.....	1
Norwood, Ohio	23,269	5	.....	.....	.....	.....	.....	.....	.....	.....
Oakland, Cal	205,405	81	2	.....	1	.....	2	.....	3	3
Ogden, Utah	32,343	17	.....	.....	.....	.....	.....	.....	.....	.....
Oil City, Pa	20,162	.....	2	.....	.....	.....	.....	.....	.....	.....
Oklahoma City, Okla	97,588	30	.....	.....	.....	.....	.....	.....	2	3
Olean, N. Y	16,927	7	.....	.....	.....	.....	.....	.....	.....	.....
Omaha, Nebr	177,777	114	10	2	4	.....	2	1	.....	11
Orange, N. J	33,636	21	3	.....	.....	.....	.....	.....	.....	.....
Oshkosh, Wis	35,549	9	.....	.....	1	.....	.....	.....	.....	.....
Ossining, N. Y	14,004	8	1	.....	.....	.....	1	.....	1	.....
Oswego, N. Y	21,219	1	1	.....	.....	.....	2	.....	1	.....
Palestine, Tex	12,075	5	.....	.....	.....	.....	.....	.....	.....	.....
Parkersburg, W. Va	21,059	6	3	.....	.....	.....	.....	.....	1	1
Pasadena, Cal	49,620	15	.....	.....	.....	.....	1	.....	.....	.....
Passaic, N. J	74,478	16	5	.....	.....	.....	.....	.....	1	1
Pawtucket, R. I	60,666	29	3	.....	.....	.....	1	.....	.....	3
Peekskill, N. Y	19,034	6	.....	.....	.....	.....	.....	.....	.....	.....
Pekin, Ill	10,973	.....	6	.....	.....	.....	.....	.....	.....	.....
Peoria, Ill	72,184	37	1	.....	.....	.....	1	.....	.....	2
Perth Amboy, N. J	42,646	7	.....	.....	.....	.....	.....	.....	1	1
Philadelphia, Pa	1,735,514	548	70	2	13	.....	20	.....	66	52
Piqua, Ohio	14,275	14	.....	.....	.....	.....	.....	.....	.....	.....
Pittsburgh, Pa	586,196	.....	18	.....	1	.....	10	.....	11	.....
Pittsfield, Mass	39,678	18	.....	.....	.....	.....	.....	.....	.....	1
Plainfield, N. J	24,330	7	3	.....	.....	.....	.....	.....	.....	1
Plymouth, Mass	14,001	18	.....	.....	.....	.....	.....	.....	.....	1
Plymouth, Pa	19,439	.....	3	.....	1	.....	.....	.....	.....	.....
Pomona, Cal	13,624	6	.....	.....	.....	.....	.....	.....	.....	1
Pontiac, Mich	18,008	7	4	.....	.....	.....	2	.....	.....	.....
Port Chester, N. Y	16,727	5	.....	.....	.....	.....	.....	.....	2	2
Portland, Me	64,720	67	.....	.....	.....	.....	.....	.....	.....	2
Portland, Oreg	308,399	112	4	1	1	.....	4	.....	8	4
Portsmouth, N. H	11,790	.....	.....	.....	.....	.....	.....	.....	1	.....
Pottsville, Pa	22,717	.....	2	.....	.....	.....	.....	.....	.....	.....
Providence, R. I	259,895	113	19	3	.....	.....	6	.....	.....	9
Quincy, Ill	36,832	17	.....	.....	.....	.....	1	.....	.....	.....
Rahway, N. J	10,361	8	.....	.....	.....	.....	.....	.....	.....	.....
Raleigh, N. C	20,274	18	.....	.....	.....	.....	.....	.....	1	1
Reading, Pa	111,607	.....	7	.....	22	.....	1	.....	.....	.....
Redlands, Cal	14,573	.....	.....	.....	.....	.....	1	.....	1	.....
Richmond, Va	158,702	114	6	1	1	.....	.....	.....	1	11
Riverside, Cal	20,496	15	.....	.....	.....	.....	1	.....	.....	3
Roanoke, Va	48,282	27	2	.....	3	.....	.....	.....	.....	.....
Rochester, N. Y	261,714	148	6	1	1	.....	11	.....	5	5
Rockford, Ill	56,739	18	.....	.....	.....	.....	1	.....	.....	2

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 21, 1918—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Rock Island, Ill	29,452	19					1			
Rocky Mount, N. C	13,673	3	1							
Rome, N. Y	24,259								1	
Rutland, Vt	15,033	7								
Sacramento, Cal	65,904	55	1				1		3	
Saginaw, Mich	56,469	40	3		1		1			
St. Joseph, Mo	80,406	37	8	1			6		2	
St. Louis, Mo	768,630	463	42	3	2		12		25	18
St. Paul, Minn	252,465	130	9	3	1		9		5	3
Salem, Mass	49,346		4				2			
Salt Lake City, Utah	121,623	48	5	1	1		5	1		
San Angelo, Tex	[1] 10,321	5								1
San Antonio, Tex	128,215	29							6	6
San Diego, Cal	56,412	95	2						3	1
Sandusky, Ohio	20,286	20							1	
Sanford, Me	11,217	2								
Santa Barbara, Cal	15,340	6	1							
Santa Cruz, Cal	15,150	2					1			
Saratoga Springs, N. Y	12,630	6								
Sault Ste. Marie, Mich	14,130	2								
Schenectady, N. Y	103,774	25	4		2				2	
Shamokin, Pa	21,274		5		2					
Shenandoah, Pa	29,753		1		3				6	
Sioux City, Iowa	58,568		1							
Sioux Falls, S. Dak	16,987	4								
Somerville, Mass	88,618	28	4				2		4	
South Bend, Ind	70,967	21								1
Southbridge, Mass	14,465	5								
Springfield, Ill	62,623	51	2							1
Springfield, Mass	109,668	85	6	1			1		4	4
Springfield, Ohio	52,298	20			38					
Stockton, Cal	36,209	46								
Superior, Wis	47,167	15	1							
Syracuse, N. Y	158,559	47	7				13		4	3
Tacoma, Wash	117,448		3		1		3			
Taunton, Mass	36,610	13			16		1		1	1
Terre Haute, Ind	67,361	28								2
Toledo, Ohio	202,010	134	8	1	1		5	2	1	5
Trenton, N. J	112,974	52	6		1				4	3
Tuscaloosa, Ala	10,824	7	1						2	
Vallejo, Cal	13,208	2								
Waco, Tex	34,015	6	1		3				1	1
Waltham, Mass	31,011	8					2			1
Warren, Pa	15,083	2								
Washington, D. C	369,282	231	18	5	2		5		13	9
Washington, Pa	22,076		1							
Waterloo, Iowa	36,987	25					1			
Watertown, Mass	15,188	2	2							
Wausau, Wis	19,066	5								1
West Chester, Pa	13,403								1	
Westfield, Mass	18,769	18	5	1			3		1	1
West Hoboken, N. J	44,395	10	1						1	
West New York, N. J	19,613	2	1				2		1	
West Orange, N. J	13,964	5	3		1		1			
Wheeling, W. Va	43,657	31								2
Wichita, Kans	73,597								2	1
Wilkes-Barre, Pa	73,484		1							
Wilkinsburg, Pa	23,899		1							
Wilmington, Del	95,369	34	3	1			1		3	3
Wilmington, N. C	30,400	16							1	2
Winchester, Mass	10,812	4								
Winona, Minn	[1] 18,583	6								1
Winston-Salem, N. C	33,136	33					1		2	2
Winthrop, Mass	13,105		1							
Woburn, Mass	16,076	12								
Worcester, Mass	184,906	83	4		9		5		7	4
Yonkers, N. Y	163,066	25	1				1			2
Youngstown, Ohio	112,282	46	1		3		4		2	1
Zanesville, Ohio	31,320	24					1			2

[1] Population Apr. 15, 1910.

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FOREIGN.

INFLUENZA ON VESSELS.

Steamship "Aikoku Maru"—Ponta Delgada, Azores.

Influenza affecting nearly the entire crew was reported December 28, 1918, on the steamship *Aikoku Maru* at Ponta Delgada, Azores.

Steamship "Demerara"—Rio de Janeiro, Brazil.

An epidemic outbreak of influenza was reported at Rio de Janeiro, Brazil, occurring in connection with the arrival at that port of the steamship *Demerara* from Europe.

BRAZIL.

Influenza—Para.

During the period from October 20 to November 23, 1918, 21,000 cases of influenza, with 541 fatalities, were reported at Para, Brazil.

Further Relative to Influenza—Rio de Janeiro.[1]

According to information dated October 30, 1918, epidemic influenza had occurred at Rio de Janeiro, Brazil. It was stated that the infection spread rapidly and that within a few days there were between 200,000 and 300,000 cases of the disease. It was estimated that about 700,000 inhabitants of the city, the population of which was approximately 1,000,000, were attacked. The number of fatalities was estimated at about 15,000, occurring during a prevalence of less than six weeks. On October 30, 1918, the disease was reported to be still present but with an inconsiderable number of cases.

CHILE.

Typhus Fever—Santiago—Valparaiso.

Typhus fever was reported present at Santiago, Chile, December 30, 1918, with about 30 cases, and at Valparaiso with about 300 cases.

ECUADOR.

Antimosquito Campaign—Guayaquil.

According to information dated November 27, 1918, a campaign for the destruction of the yellow fever mosquito has been initiated at Guayaquil, Ecuador. Insanitary localities are stated to be in process of correction, both as regards the destruction of larvæ and the prevention of egg laying.

[1] Public Health Reports, Oct. 25, 1918, p. 1847.

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PORTUGUESE EAST AFRICA.

Influenza—Lourenço Marques.

During the two weeks ended November 3, 1918, 239 cases of influenza were reported at Lourenço Marques, Portuguese East Africa.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Jan. 10, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Aug. 18–Oct. 5	15	11	
Indo-China:				
Cochin-China—				
Saigon	Oct. 7–Nov. 3	15	9	
Mesopotamia:				
Bagdad	Oct. 11–18	1		
Philippine Islands:				
Manila	Oct. 27–Nov. 2	20	12	
Provinces				Oct. 27–Nov. 2, 1918: Cases, 247; deaths, 206.
Batangas	Oct. 27–Nov. 2	111	97	
Bonol	do	2	2	
Bulacan	do	5	6	
Cavite	do	20	16	
Iloilo	do	3	3	
Laguna	do	2	2	
Misamis	do	6	5	
Oriental Negros	do	4	3	
Pangasinan	do	87	69	
Rizal	do	3	1	
Union	do	4	2	
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17–Aug. 21	2,943	1,455	In civil hospitals. In military hospitals, July 5–Aug. 21, 1918: Cases, 884; deaths, 783.

PLAGUE.

Ecuador:				
Guayaquil	Nov. 1–15	3	3	
India				Sept. 23–Oct. 19, 1918: Cases, 9,965; deaths, 7,756.
Bombay	Aug. 18–Oct. 19	32	21	
Karachi	Sept. 22–Oct. 19	15	15	
Madras Presidency	Oct. 13–26	206	135	
Indo-China:				
Cochin-China—				
Saigon	Oct. 7–Nov. 3	3	1	

SMALLPOX.

Algeria:				
Algiers	Oct. 1–31	1		
Canada:				
New Brunswick—				
St. John	Nov. 8–14	3		
Quebec—				
Montreal	Nov. 24–30	1		
Quebec	Dec. 15–21	1		Reported as varioloid.
India:				
Bombay	Aug. 18–Oct. 19	11	3	
Karachi	Sept. 29–Oct. 5	1	1	
Indo-China:				
Cochin-China—				
Saigon	Oct. 7–20	13	3	
Japan:				
Kobe	Nov. 17–30	48	8	
Mesopotamia:				
Bagdad	Oct. 11–18	11		
Mexico:				
Ciudad Juarez	Nov. 24–30	1		

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Jan. 10, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Newfoundland:				
St. Johns	Dec. 14–20	1		
Out ports—				
Baine Harbor	do	2		
Bryants Cove	Dec. 7–13	3		
Burin	do	4		
Coleys Point	Dec. 14–20	1		
Musgrave Harbor	Dec. 7–13	4		
Paradise	do	60		Placentia Bay.
Spain:				
Cadiz	Oct. 1–31		3	
Madrid	Sept. 1–Oct. 31		155	
Straits Settlements:				
Penang	Oct. 6–12	1		
Union of South Africa:				
Cape of Good Hope State—				
Cape Town	Aug. 1–30	1		

TYPHUS FEVER.

Colombia:				
Barranquilla	Nov. 8–Dec. 7		2	
Egypt:				
Alexandria	Oct. 1–7	16	6	
Greece:				
Saloniki	Sept. 29–Oct. 19		19	

YELLOW FEVER.

Ecuador:				
Duran	Nov. 1–15	1	1	
Guayaquil	do	38	21	
Milagro	do	1		

Reports Received from Dec. 28, 1918, to Jan. 3, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Madras	Oct. 5–26	36	18	
Rangoon	Oct. 5–12	1	1	
Indo-China:				
Annam	Aug. 1–31	5	5	
Cambodia	do	98	71	
Cochin-China	do	110	89	
Tonkin	do	1		
Java:				
East Java				Oct. 7–21, 1918: Cases, 109; deaths, 91.
Surabaya	Oct. 7–21	7	6	
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 1,398; deaths, 887.
Samarang	Sept. 25–Oct. 16	129	111	
West Java				Oct. 2–23, 1918: Cases, 198; deaths, 112.
Batavia	Oct. 2–23	140	84	
Philippine Islands:				
Manila	Nov. 3–9	8	4	
Provinces				Nov. 2–9, 1918: Cases, 264; deaths, 211.
Batangas	Nov. 3–9	45	44	
Bohol	do	17	15	
Cavite	do	18	12	
Iloilo	do	6	3	
Oriental Negros	do	16	5	
Pangasinan	do	148	123	
Tayabas	do	7	4	
Union	do	7	5	

[1] From medical officers of the Public Health Service, American consuls, and other sources. For reports received from June 29, 1918, to Dec. 27, 1918, see Public Health Reports for Dec. 27, 1918. The tables of epidemic diseases are terminated semiannually and new tables begun.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Jan. 3, 1919—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy				Present.
Hongkong	Oct. 26–Nov. 2	1	1	
Do	Nov. 9–16	1	1	
Nanking	Nov. 2–9			Always prevalent.
India:				
Karachi	Oct. 19–26	1	1	
Rangoon	Oct. 5–12	22	22	
Indo-China:				
Anam	Aug. 1–31	15	10	
Cambodia	do		23	
Cochin-China	do	14	11	
Java:				
East Java				Oct. 7–21, 1918: Cases, 17; deaths, 17.
Surabaya	Oct. 7–21	3	3	
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 14, deaths, 11.
Samarang	Sept. 25–Oct. 16	6	6	
Siam.				
Bangkok	Sept. 21–28	4	3	
Do	Oct. 5–12	2	2	

SMALLPOX.

Canada:				
Halifax	Dec. 7–14	4		
Montreal	Dec. 14–21	1		
China:				
Amoy	Oct. 13–20			Present.
Do	Oct. 28–Nov. 4			Do.
Foochow				Always prevalent.
Denmark:				
Copenhagen	Nov. 9–23	5		
India:				
Madras	Oct. 5–26	12	8	
Indo-China:				
Anam	Aug. 1–31	29	8	
Cambodia	do	78	40	
Cochin-China	do	97	27	
Tonkin	do	5		
Japan:				
Kobe	Oct. 26–Nov. 9	7	4	
Java:				
East Java				Oct. 7–21, 1918: Cases, 6.
Surabaya	Oct. 7–21	3		
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 55.
West Java				Oct. 2–23, 1918: Cases, 313; deaths, 101.
Batavia	Oct. 2–23	73	58	
Newfoundland:				
St. Johns	Dec. 6–13	3		
Philippine Islands:				
Manila	Nov. 2–9	2	2	
Portugal:				
Lisbon	Nov. 16–23	255		

TYPHUS FEVER.

Brazil:				
Ceara	Sept. 14–21	1		
Egypt:				
Alexandria	Oct. 14–Nov. 25	63	39	
Japan:				
Nagasaki	Nov. 10–24	2	1	
Java:				
East Java				Oct. 7–21, 1918: Cases, 5.
Surabaya	Oct. 7–21	4		
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 8.
West Java				Oct. 2–23: Cases, 31; deaths, 6.
Batavia	Oct. 2–23	15	4	
Union of South Africa:				
Port Elizabeth	Sept. 14–28			Present among natives in several interior towns.

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PUBLIC HEALTH REPORTS

VOL. 34 JANUARY 17, 1919 No. 3

EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

Reports from State health officers and from the zones surrounding Army camps indicate that there has not been any decided general change in the prevalence of influenza in the United States. In Louisiana a recrudescence of the disease is reported from a number of places, and in California the disease appears to be increasing in most communities.

The reports from States for the week ended January 11, 1919, as compared with the preceding week, show increases in the number of cases reported from Arkansas, California, Florida, Indiana, Kansas, Louisiana, Massachusetts, Oregon, and Washington.

Decreases in the number of cases reported are noted in Connecticut, Maine, Michigan, New Jersey, North Carolina, Vermont, and Virginia. (See pp. 80 and 84 of this issue of the Public Health Reports.)

RESOLUTIONS PASSED BY NATIONAL COMMISSION ON MILK STANDARDS.

[Meeting held in Chicago, Ill., Dec. 8, 1918.]

The National Commission on Milk Standards appointed by the New York milk committee has received from its members reports concerning the prices paid for milk to the producer and the prices at which milk is sold to the consumer, the quantity of milk sold, and the mortality statistics from localities represented by members of the commission, including Boston, New York, Philadelphia, Wilmington, Baltimore, Toronto, Indianapolis, Chicago, Jacksonville, and others, and it is the judgment of the commission—

(1) That the price of milk to the consumer from 1914 to 1918 has in general increased from 50 to 100 per cent.

(2) That while the quantity of milk consumed has fluctuated in the cities from which reports have been received, yet generally at the present time it is not less than the normal or usual supply.

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(3) That there has been an improvement in infant mortality and a lessening in diarrheal diseases under 2 years of age and that this improvement has not been checked by the advance in the price of milk between 1914 and 1918.

(4) That evidence presented to the commission indicates the seriousness of undernourishment or malnutrition among children of school age. The commission believes that the cause of this is an improperly regulated diet due to some extent to poverty and to a larger extent to lack of appreciation of the value of milk as compared with other foods.

(5) That the proportionate increase in the price of other foods generally has been greater than the increase in the price of milk.

(6) That at present retail prices milk is the most economical animal food that can be purchased.

(7) The commission recognized that the results of nutrition investigations during the past 10 years have demonstrated that satisfactory nutrition is to be secured only through the employment of certain combinations of foods. It recognizes that milk, eggs, and green leafy vegetables are so constituted as to correct, when taken in liberal amounts, the deficiencies from the dietary standpoint of cereal products, peas, beans, tubers, edible roots, and meats. Since good nutrition can not be secured on diets from which milk, eggs and the leafy vegetables are absent, it is of the greatest importance that the use of these classes of foods should be extended.

It is further recognized that among these milk is the most effective and most economical and that milk is the one food for which there is no satisfactory substitute.

The commission received reports of special tests made in many municipal and private laboratories on 100 samples of milk taken from the same quart bottle by the standard methods for determining the numbers of bacteria in milk recommended by the laboratory section of the American Public Health Association, and basing its opinion on these and previous reports the commission passed the following resolution:

"The commission believes that experience has shown that the present standard methods of the laboratory section of the A. P. H. A., for making the bacterial test of milk in the hands of properly trained workers are satisfactory for the control of the sanitary character of raw milk on the efficiency of pasteurizing machines for destroying bacteria, and for the enforcement of regulations for milk control by such grades and standards as have been recommended by this commission."

The use of powdered whole milk, skim milk powder, condensed or evaporated whole milk or skim milk, butter fat or other fats and water and of machines for recombining, mixing, or emulsifying these materials for the production of manufactured milk or cream was

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[redacted] into human consumption the largest possible proportion of all wholesome milk products, and to this end recommends that the sale of such products as recombined milk should not be hampered by any restrictions beyond those absolutely necessary for the prevention of fraud and the protection of health.'

"3. In the case of recombined milk made exclusively from cream or butter and milk or skim milk, fresh, condensed or dried, the materials having always been maintained in sound condition and not subjected to unnecessary heating, the interests of the consumer in our opinion demand nothing further than that the product as delivered to the purchaser shall meet all the requirements as to cleanliness, bacteria count, and chemical composition of fresh milk of the same grade or class, and shall be labeled in a manner that will correctly indicate its true character."

MENTAL HYGIENE A PUBLIC HEALTH ACTIVITY.

As is so often the case with other chronic illnesses, e. g., tuberculosis, malaria, Bright's disease, it is difficult to rouse the people to an appreciation of the need of taking steps to combat and control mental disease. To a large extent, to be sure, this is due to the persistence of the belief that mental disorders are a kind of a mysterious dispensation, and that little or nothing can be done either to effect a cure of those affected, or to prevent the development of these dread disorders.

Continuing the comparison with other chronic diseases, it may be pointed out that only in recent years has the fact become established that a very large proportion of the mentally ill have hitherto escaped

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recognition. Early signs and symptoms of mental disorder have been overlooked, and the diagnosis of "insanity" has often been established only when it was too late to effect a cure. To be sure we have by no means reached the stage where all forms of mental disease are curable. Nevertheless sufficient is known to assure a considerable reduction in the prevalence of mental disorders provided certain practicable measures are taken.

At the present time, institutional care is generally provided only for the more pronounced types of mental disorders. According to the United States Census Bureau there were, in 1910, 187,791 persons in hospitals for the insane and 20,731 persons in institutions for the feeble-minded. While this gives some idea of the number of mental cases cared for in institutions specially provided for them, it must be remembered that it does not represent the total number of cases in this country, as many such individuals who are in need of institutional care never receive it. It has been calculated that the aggregate cost to the country of the insane alone is more than $160,000,000 annually. Added to this, and really more serious, are the personal suffering, unhappiness, social and family disasters, and business troubles brought about by mental disease.

On the basis of the lowest estimates there are two insane and four feeble-minded individuals for every 1,000 persons in the general population of the United States. Field investigations by officers of the United States Public Health Service indicate that in school children the ratio of feeble-minded will average eight per thousand.

The medical examinations of registrants in the first selective draft showed that out of each 1,000 men examined, 24 were denied military duty because of nervous or mental disorders. Other cases were unrecognized or developed under stress of military training and warfare, necessitating their return home.

Many of those who comprise the dependent and criminal population suffer from some type of mental disorder, either acquired or hereditary, and this disorder often constitutes the underlying cause of their dependency or imprisonment. Of the 84,198 persons confined in almshouses in 1910, at least 42,000 had some form of mental alienation; of the 136,472 persons in prisons, jails, workhouses, and institutions for juvenile delinquents at least 30,000 were mentally diseased. This gives some idea of the relation of mental disease to dependency and crime.

It is high time for physicians and health officers to take an active interest in mental disease as a public-health problem. Early recognition of the signs and symptoms of mental disorder, attention to the various causative factors (social, family, occupational, hereditary, infectious), provision for the proper care of the mentally ill—these represent a practicable program which is certain to achieve satisfactory results.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED JAN. 11.

CAMP BOWIE ZONE, TEX.

Fort Worth:	Cases.
Chancroid	1
Chicken pox	2
Diphtheria	1
Gonorrhea	7
Influenza	18
Measles	3
Meningitis	7
Pneumonia	15
Syphilis	3

BREMERTON ZONE, WASH.

Chicken pox	1
Influenza	244
Measles	2
Mumps	1

CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	
Diphtheria	4
Influenza	97

CAMP DEVENS ZONE, MASS.

Cerebrospinal meningitis:	
Lancaster	1
Influenza:	
Ayer	6
Lancaster	37
Lunenburg	7
Shirley	7

CAMP DIX ZONE, N. J.

Influenza:	
Chesterfield Township	4

CAMP DODGE ZONE, IOWA.

Des Moines:	
Diphtheria	3
Influenza	12
Scarlet fever	6
Smallpox	3

CAMP DONIPHAN ZONE, OKLA.

Comanche County:	
Smallpox	5
Lawton:	
Chancroid	1
Gonorrhea	7
Influenza	1

CAMP EBERTS ZONE, ARK.

Influenza:	Cases.
Austin	7
Carlisle, R. F. D.	3
Keo	2
Lonoke	4
Lonoke, R. F. D.	12
Ward	15
Ward, R. F. D.	7

CAMP FUNSTON ZONE, KANS.

Chicken pox:	
Manhattan	3
Diphtheria:	
Manhattan	1
Gonorrhea:	
Junction City	1
Influenza:	
Junction City	1
Manhattan	43
Randolph	5
Rural district	33
Measles:	
Manhattan	1
Mumps:	
Junction City	1
Manhattan	1
Pneumonia:	
Junction City	1
Pneumonia, broncho:	
Randolph	1
Scarlet fever:	
Junction City	1

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Influenza:	
Bibb City	3
Columbus	91
Girard	6
Muscogee County	21
Phenix City	8
Measles:	
Columbus	4
Girard	1
Pellagra:	
Muscogee County	1

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GAS AND FLAME SCHOOL ZONE, GA. AND ALA.—con.

Pneumonia:	Cases.
Columbus	1
Girard	1
Muscogee County	1
Scarlet fever:	
Columbus	1
Smallpox:	
Columbus	1
Girard	1
Muscogee County	1
Syphilis:	
Columbus	6
Girard	1
Tuberculosis:	
Columbus	2

GERSTNER FIELD ZONE, LA.

Influenza	75
Pneumonia	8
Smallpox	6

CAMP GORDON ZONE, GA.

Atlanta:	
Chicken pox	1
Diphtheria	4
Gonorrhea	12
Influenza	113
Measles	3
Pneumonia	1
Scarlet fever	2
Septic sore throat	1
Smallpox	30
Syphilis	15

CAMP GREENE ZONE, N. C.

Charlotte Township:	
Chancroid	1
Diphtheria	1
Gonorrhea	4
Influenza	46
Scarlet fever	2
Syphilis	2

GULFPORT HEALTH DISTRICT, MISS.

Dysentery:	
Kiln	1
Gonorrhea:	
Biloxi	1
Gulfport	1
Lyman	1
Pascagoula	2
Influenza:	
Bay St. Louis	7
Biloxi	95
Gulfport	329
Kiln	1
Logtown	10
Long Beach	74
Lyman	55
Mississippi City	4
Moss Point	100
Ocean Springs	2
Pass Christian	76
Pascagoula	7
Saucier	3

GULFPORT HEALTH DISTRICT, MISS.—continued.

Malaria:	Cases.
Moss Point	3
Pass Christian	1
Saucier	5
Mumps:	
Gulfport	1
Moss Point	2
Pneumonia:	
Bay St. Louis	1
Biloxi	11
Gulfport	3
Moss Point	1
Pass Christian	6
Whooping cough:	
Lyman	2
Moss Point	3

CAMP HANCOCK ZONE, GA.

Augusta:	
Chicken pox	1
Influenza	337

CAMP HUMPHREYS ZONE, VA.

Alexandria:	
Influenza	94
Pneumonia	7
Tonsilitis	3
Tuberculosis, pulmonary	2
Alexandria County:	
Influenza	11

CAMP JACKSON ZONE, S. C.

Columbia:	
Diphtheria	3
Influenza	5
Measles	3
Mumps	5
Pneumonia	2
Tuberculosis	1
United States Government Clinic:	
Gonorrhea	4
Syphilis	11

CAMP JOSEPH E. JOHNSTON ZONE, FLA.

Jacksonville:	
Chancroid	2
Gonorrhea	30
Influenza	39
Measles	20
Mumps	1
Pneumonia	2
Scarlet fever	1
Syphilis	21
Tuberculosis	5
Typhoid fever	1

FORT LEAVENWORTH ZONE, KANS.

Leavenworth:	
Diphtheria	2
Influenza	15
Measles	1
Mumps	1
Leavenworth County:	
Influenza	9

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CAMP LEE ZONE, VA.

	Cases.
Ettricks:	
Cerebrospinal meningitis	1
Petersburg:	
Chancroid	1
Gonorrhea	4
Influenza	395
Measles	1
Pneumonia	25
Syphilis	1
Prince George County:	
Influenza	3

CAMP LEWIS ZONE, WASH.

Influenza:	
Clover Creek	5
Greendale	1
Lakeview	10
Parkland	4
Roy	1
Spanaway	2
Steilacoom Lake	2
Mumps:	
Hillhurst	2

CAMP LOGAN ZONE, TEX.

Houston:	
Diphtheria	1
Gonorrhea	2
Influenza	12
Pneumonia	2
Trachoma	2

CAMP M'ARTHUR ZONE, TEX.

Waco:	
Diphtheria	1
Influenza	10
Pneumonia	3
Tuberculosis	3

CAMP M'CLELLAN ZONE, ALA.

Anniston:	
Chancroid	1
Chicken pox	1
Gonorrhea	6
Influenza	23
Mumps	2
Pneumonia	1
Syphilis	2
Oxford:	
Influenza	3

CAMP MERRITT ZONE, N. J.

Chicken pox:	
Englewood	4
Tenafly	4
Diphtheria:	
Englewood	1
Influenza:	
Closter	16
Demarest	4
Dumont	4
Englewood	66
Tenafly	5
Pneumonia:	
Englewood	1
Scarlet fever:	
Englewood	2

FORT OGLETHORPE ZONE, GA. AND TENN.

	Cases.
Gonorrhea:	
Chattanooga	34
Influenza:	
Chattanooga	16
Eastlake	1
North Chattanooga	12
Syphilis:	
Chattanooga	43

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Influenza	15
Measles	8
Smallpox	3

CAMP PIKE ZONE, ARK.

Chicken pox:	
Little Rock	4
Gonorrhea:	
Little Rock	5
Influenza:	
Cabot	1
Little Rock	230
North Little Rock	10
Malaria:	
North Little Rock	1
Measles:	
Levy	1
Little Rock	1
North Little Rock	1
Meningitis:	
Little Rock	2
Mumps:	
Little Rock	1
Pneumonia:	
Little Rock	35
North Little Rock	2
Salpingitis:	
Little Rock	1
Scarlet fever:	
Little Rock	3
Syphilis:	
Little Rock	1
Tuberculosis:	
Little Rock	3

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Cerebrospinal meningitis:	
Gilmerton	2
Diphtheria:	
Norfolk County	9
South Norfolk	1
Influenza:	
Norfolk	[illegible]
Norfolk County	230
Portsmouth	180
Measles:	
Norfolk	2
Portsmouth	3
South Norfolk	4
Mumps:	
Norfolk	3
Pneumonia:	
Port Norfolk	3

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PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.—continued.

	Cases.
Scarlet fever:	
Norfolk	1
Smallpox:	
Norfolk County	2
Ocean View	1

PORTSMOUTH-KITTERY SANITARY DISTRICT, N. H. AND ME.

Chicken pox:	
Portsmouth	4
Influenza:	
Greenland	1
Hampton	6
Kittery	9
Newington	4
North Hampton	17
Portsmouth	36
Rye	1
York	5
Whooping cough:	
Portsmouth	1

CAMP SEVIER ZONE, S. C.

Bates Township:	
Tuberculosis	3
Greenville:	
Diphtheria	2
Scarlet fever	1
Whooping cough	3
Greenville and vicinity:	
Influenza	286
Pneumonia	16

CAMP SHERIDAN ZONE, ALA.

Montgomery:	
Chicken pox	1
Influenza	15
Measles	1
United States Government Clinic:	
Chancroid	2
Gonorrhea	9
Syphilis	7

CAMP SHERMAN ZONE, OHIO.

Cancer:	
Chillicothe	1
Gonorrhea:	
United States Government Clinic	10
Influenza:	
Chillicothe	5
Pneumonia:	
Liberty Township	1
Scarlet fever:	
Chillicothe	1
South Union Township	1

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Chicken pox:	
Jefferson County	2
Louisville	1
Diphtheria:	
Jefferson County	2
Jeffersonville	1
Louisville	7

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.—con.

	Cases.
Gonorrhea:	
United States Government Clinic	28
Venereal clinic, county jail	33
Influenza:	
Clark County	105
Floyd County	9
Jefferson County	65
Jeffersonville	14
Louisville	64
New Albany	27
Measles:	
Jefferson County	1
Louisville	2
Pneumonia:	
Jefferson County	1
Scarlet fever:	
Louisville	2
Syphilis:	
United States Government Clinic	27
Venereal clinic, county jail	12
Tuberculosis, pulmonary:	
Louisville	5
Typhoid fever:	
Jeffersonville	1

TIDEWATER HEALTH DISTRICT, VA.

Newport News:	
Chicken pox	2
Gonorrhea	8
Influenza	9
Measles	2
Syphilis	1
Tuberculosis	2
Typhoid fever	3
Phoebus:	
Scarlet fever	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chancroid	2
Gonorrhea	15
Influenza	273
Measles	3
Mumps	2
Pneumonia	3
Syphilis	5
Tuberculosis	5
Typhoid fever	3

CAMP UPTON ZONE, N. Y.

Chicken pox:	
Riverhead	1
Pneumonia:	
Brookhaven	1
Riverhead	4

VANCOUVER ZONE, WASH.

Influenza	186
Tuberculosis, pulmonary	1

CAMP WADSWORTH ZONE, S. C.

Gonorrhea:	
Fairforest	1
Moore	1
Spartanburg	5
Walnut Grove	1
Woodruff	1

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CAMP WADSWORTH ZONE, S. C.—continued.

	Cases.
Influenza:	
Saxon Mills	1
Spartanburg	33
Measles:	
Spartanburg	1
Whooping cough:	
Spartanburg	1

CAMP WHEELER ZONE, GA.

Macon:	
Diphtheria	1
Influenza	75
Pneumonia	2

WILMINGTON SANITARY DISTRICT, N. C.

	Cases.
Chicken pox:	
Sunset Park	1
Wilmington	1
Influenza:	
Cape Fear Township, rural	1
Wilmington	36
Mumps:	
Wilmington	1
Pneumonia:	
Cape Fear Township, rural	1
Wilmington	4

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended January 3, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes):		
All troops in United States	1,265.72	1,022.84
American Expeditionary Forces	901.02	944.91
Annual admission rate per 1,000 (disease only):		
All troops in United States	1,025.88	787.55
American Expeditionary Forces	721.50	755.84
Noneffective rate per 1,000 on day of report:		
All troops in United States	47.34	42.03
American Expeditionary Forces	66.79	74.59
Annual death rate per 1,000 (all causes):		
All troops in United States	10.57	12.92
American Expeditionary Forces	39.88	32.27
Annual death rate per 1,000 (disease only):		
All troops in United States	9.98	12.17
American Expeditionary Forces	9.24	7.57

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Cases of special diseases reported during the week ending Jan. 3, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
				Total.	New infections.						
Beauregard	6	.....	1	35	0	.....	9	.....	.....	$1,218.81	38.57
Bowie	5	.....	1	190	0	8	1	.....	.....	1,950.31	33.97
Cody	.....	.....	.....	.....	.....	1	.....	.....	1	528.67	75.23
Forrest	.....	1	.....	3	.....	.....	14	.....	.....	576.92	58.99
Fremont	7	.....	.....	2	1	6	.....	.....	.....	781.50	52.80
Greene	6	.....	.....	11	0	9	4	.....	.....	546.28	40.93
Greenleaf	.....	.....	.....	2	0	2	1	.....	.....	508.34	32.23
Hancock	22	.....	.....	16	5	6	.....	1	.....	655.06	49.15
Kearny	11	.....	.....	22	6	41	.....	.....	.....	470.96	16.48
Logan	4	.....	.....	18	2	33	11	.....	.....	621.69	40.39
MacArthur	.....	.....	.....	.....	.....	2	.....	.....	.....	1,115.37	51.47
McClellan	32	.....	.....	8	4	25	3	1	.....	791.07	51.21
Sevier	4	.....	.....	7	2	3	1	.....	.....	691.53	38.59
Shelby	5	.....	.....	19	7	14	.....	.....	.....	1,329.56	74.47
Sheridan	2	.....	.....	30	5	.....	2	1	.....	984.08	46.09
Wadsworth	1	.....	.....	3	.....	.....	4	.....	.....	301.50	40.35
Wheeler	1	.....	.....	6	.....	.....	6	.....	.....	1,001.79	196.68
Custer	8	.....	.....	17	5	.....	4	.....	4	797.59	23.17
Devens	9	.....	.....	14	14	35	3	1	.....	644.32	35.78
Dix	11	.....	.....	3	0	27	1	.....	.....	1,008.68	68.05
Dodge	8	.....	.....	29	9	63	18	.....	2	1,239.14	51.67
Fustis	10	.....	.....	7	0	10	.....	.....	.....	1,184.06	68.31
Funston	20	.....	.....	23	2	41	2	2	22	842.03	39.32
Gordon	4	.....	.....	14	0	28	5	.....	.....	700.94	38.92
Grant	7	.....	.....	5	0	13	3	.....	.....	579.82	33.96
Humphreys	10	.....	.....	8	1	9	5	.....	.....	574.87	26.99
Jackson	19	.....	.....	36	1	7	15	.....	.....	771.84	43.25
J. F. Johnston	16	.....	1	20	4	34	4	.....	1	747.96	32.46
Las Casas	3	.....	52	2	0	3	.....	.....	.....	860.73	28.11
Lee	4	.....	.....	51	2	60	19	2	4	960.48	51.04
Lewis	69	.....	.....	19	4	15	7	.....	3	1,008.08	48.54
Meade	5	1	.....	10	2	30	21	.....	.....	501.08	22.82
Pike	15	.....	.....	11	0	23	3	.....	.....	1,476.27	60.01
Sherman	6	.....	1	16	0	14	3	.....	3	1,818.89	62.15
Taylor	10	.....	.....	22	5	9	2	2	2	562.10	58.25
Travis	6	.....	.....	17	0	114	19	.....	.....	2,046.31	64.72
Upton	13	.....	.....	10	0	.....	1	.....	.....	1,087.12	37.64
Northeastern Department	1	.....	.....	13	9	5	.....	.....	4	945.62	36.90
Eastern Department	12	.....	.....	13	5	51	1	.....	.....	596.44	21.80
Southeastern Department	8	.....	.....	6	4	34	4	.....	.....	795.04	29.60
Central Department	.....	.....	.....	4	0	18	.....	.....	.....	1,359.77	26.14
Southern Department	34	.....	2	72	10	112	1	1	.....	1,091.15	39.54
Western Department	3	1	1	11	0	39	.....	.....	.....	680.30	24.72
Aviation camps	45	.....	1	86	0	134	3	.....	5	706.21	37.66
Port of embarkation:											
Hoboken	23	.....	1	8	0	119	13	2	2	1,998.70	175.80
Newport News	3	.....	.....	41	2	11	15	1	....	7,255.81	208.95
Alcatraz, Disciplinary Barracks	.....	.....	.....	.....	.....	.....	.....	.....	.....	620.89	.....
Leavenworth, Disciplinary Barracks	.....	.....	.....	.....	.....	.....	3	.....	1	1,525.98	43.52
Jefferson Barracks	.....	.....	.....	2	2	.....	2	.....	.....	1,432.13	70.16
Columbus Barracks	5	.....	.....	2	1	1	.....	.....	.....	873.33	63.68
Fort Logan	.....	.....	.....	.....	.....	.....	.....	.....	.....	789.87	49.36
Fort McDowell	1	.....	.....	.....	.....	2	.....	.....	.....	637.38	28.60
Fort Sill	5	.....	.....	20	20	25	.....	.....	1	513.77	22.63
Fort Slocum	.....	.....	.....	5	0	1	.....	.....	.....	408.00	23.14
Fort Thomas	.....	.....	.....	1	1	.....	.....	.....	.....	1,242.12	51.03
West Point	5	.....	.....	.....	.....	.....	.....	.....	.....	1,700.27	32.69
Arsenals	9	.....	.....	13	0	12	2	.....	3	774.27	31.54
Miscellaneous small stations	11	.....	.....	8	0	4	5	.....	.....	617.66	22.22
General hospitals	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	518	3	61	1,011	135	1,262	240	14	58	1,025.88	47.34

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Number of deaths and annual rates per 1,000 at large camps in United States.

Camp.	Deaths.		Deaths, annual rate per 1,000.	
	All causes.	Disease only.	All causes.	Disease only.
Beauregard	1	1	4.44	4.44
Bowie	1	1	8.33	8.33
Forrest	1	1	16.94	16.94
Greene	1	1	5.15	5.15
Hancock	3	3	7.14	7.14
Kearny	1	1	3.24	3.24
Logan	2	2	8.88	8.88
MacArthur	2	2	11.74	11.74
McClellan	7	7	18.81	18.81
Sevier	3	3	10.86	16.86
Shelby	2	2	15.46	15.46
Sheridan	2	2	7.45	7.45
Wadsworth	2	2	12.56	12.56
Wheeler	2	2	46.59	46.59
Custer	2	2	3.46	3.46
Devens	3	3	6.19	6.19
Dix	10	10	25.66	25.66
Dodge	3	3	7.37	7.37
Eustis	2	1	32.89	16.45
Funston	5	5	6.97	6.97
Gordon	4	4	10.86	10.86
Grant	5	4	10.24	8.19
Humphreys	1	1	3.73	3.73
Jackson	5	5	11.02	11.02
J. E. Johnston	1	1	5.49	5.49
Las Casas	2	2	14.84	14.84
Lewis	4	3	6.51	4.34
Meade	2	1	2.89	1.44
Pike	4	4	11.01	11.01
Sherman	5	5	13.80	13.80
Taylor	3	2	5.95	3.96
Travis	5	5	11.53	11.53
Upton	4	4	12.56	12.56
Northeastern Department	1	1	9.27	9.27
Eastern Department	6	6	9.08	9.08
Southeastern Department	4	3	25.23	18.93
Central Department	1	1	11.33	11.33
Southern Department	15	13	16.75	14.50
Western Department	2	2	8.26	8.26
Aviation camps	25	24	15.08	14.48
Port of embarkation:				
Hoboken	11	11	18.47	18.47
Newport News	7	7	13.87	13.87
All others	25	23	11.81	10.87
Total	197	186	10.57	9.98

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American expeditionary force.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	27.80	26.44	24.47	30.68
Dysentery	0.16	0.14	2.40	1.45
Malaria	3.27	1.64	0.68	0.18
Venereal	54.25	52.44	28.15	26.65
Paratyphoid	0.0	0.0	0.24	0.40
Typhoid	0.21	0.0	1.22	1.66
Measles	12.88	14.26	3.62	6.69
Meningitis	0.75	1.09	1.96	2.92
Scarlet fever	3.11	2.48	1.06	1.07
Influenza	67.73	59.20	.....	.....

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No increase in other communicable diseases.

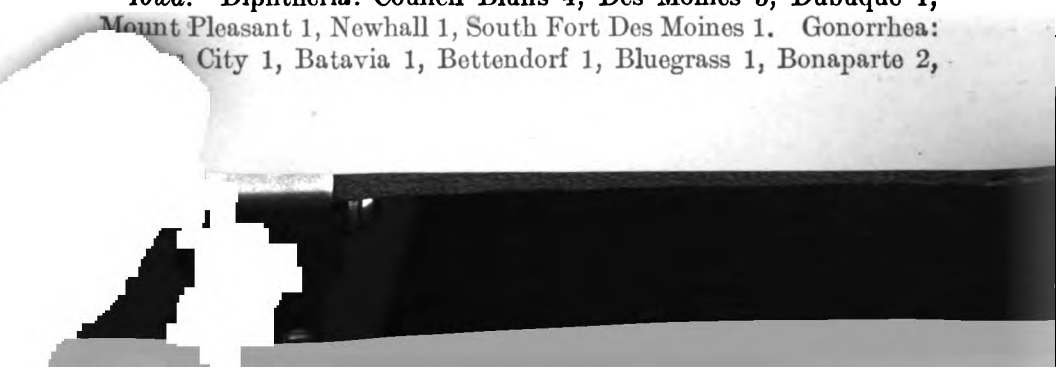
Connecticut.—No outbreak nor unusual prevalence. Influenza: Total for week 1,207.

Florida.—Typhoid fever: De Soto 1, Jacksonville 1, Escambia 2, Monroe 1, Volusia 1. Malaria: De Soto 1, Escambia 3, Hillsboro 2, Tampa 3, Taylor 1. Diphtheria: Dade 2, Duval 1, Escambia 3, Hillsboro 2, Tampa 1, Jefferson 1. Pneumonia: Dade 1, Duval 6, Escambia 10, Gadsden 3, Madison 4.

Illinois.—Diphtheria: 47, of which in Chicago 17. Scarlet fever: 65, of which in Rockford 6, Chicago 43. Smallpox: 41, of which in Elgin 5, Peoria 15, Pekin 8. Meningitis: Chicago 2. Poliomyelitis: Chicago 1. Influenza: 3,940; incidence now at lowest since October 1; towns and cities relatively clearer than rural sections; recrudescent in scattering communities as follows—Homer (Champaign County) 35, Lowe Township (Douglass County) 22, Albion (Edwards County) 22, Browns (Edwards County) 19, Pope Township (Fayette County) 63, Saint Elmo (Fayette County) 48, Fremont Township (Lake County) 70, Zion City (Lake County) 48, Long Creek Township (Macon County) 32, Mason City (Mason County) 50, Viola (Mercer County) 43, Franklin (Morgan County) 63, Chapin (Morgan County) 52, Chester (Randolph County) 42, Sparta (Randolph County) 78, Belmont (Wabash County) 50.

Indiana.—Influenza 2,974, syphilis 11, gonorrhea 25. Diphtheria: Tippecanoe County 3, Cass 1, Rush 1, Wabash 1, Marshall 2, Laporte 1.

Iowa.—Diphtheria: Council Bluffs 4, Des Moines 5, Dubuque 1, Mount Pleasant 1, Newhall 1, South Fort Des Moines 1. Gonorrhea: [illegible] City 1, Batavia 1, Bettendorf 1, Bluegrass 1, Bonaparte 2,



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Waterville 1, Bath 1, St. George 2. Measles: Portland 2. Mumps: Monson 75. Scarlet fever: South Portland 1, Bath 1, Portland 27. Syphilis: Portland 1, Lewiston 5, Auburn 1, Oakland 1. Tuberculosis: Three cases. Whooping cough: Auburn 1. Influenza: Auburn 60, Lewiston 56, Sherman 27, Westbrook 57, Greenville 15, Portland 60, Friendship 25, Gray 23, Greenwood 18, Waldoboro 87, Bangor 87, Bethel 46, Deer Isle 25, Wiscasset 21, Stacyville Place 19.

Michigan.—Influenza: Battle Creek 23, Bay City 34, Grand Rapids 163, Pontiac 25, Saginaw 72, Lansing 73, Detroit 531; total cases for week 4,308; total deaths for week 280.

Minnesota.—Smallpox (new foci): Clear Water County, Popple Township, 7; Hennepin County, Hopkins village, 1; Rock County, Luverne city 6. One cerebrospinal meningitis, 57 syphilis, 74 gonorrhea, 4 chancroid, reported since January 6.

Montana.—Influenza cases 307. (Week ended Jan. 4.)

New Jersey.—Influenza: 3,230 cases. Pneumonia: 484 cases. No other reportable diseases unusually prevalent.

New York.—Outside of New York City. Diphtheria 177 (slight decrease), scarlet fever 117, typhoid fever 12, whooping cough 65 (increase over preceding week), pneumonia 172. Voluntary reports: Syphilis 106, gonorrhea 28.

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North Carolina.—Whooping cough 28, measles 34, diphtheria 18, scarlet fever 11, septic sore throat 3, smallpox 20, chicken pox 12, typhoid fever 11, meningitis 1, broncho-pneumonia 53, lobar pneumonia 24. Influenza: Reported by counties—Chatham 16, Clay 3, Cleveland 250, Cumberland 57, Davidson 111, Franklin some new cases, Gaston 52, Johnston 255, Jones 25, Montgomery 90, Pitt 80, Rockingham 17; reported by cities—Charlotte 48, Raleigh 17, Wilmington 17.

Ohio.—Scarlet fever: Lima 8 cases. Smallpox: Steubenville 8 cases. Scioto County 9 cases. Trachoma: Portsmouth 17 cases. Venereal diseases 128 cases for State.

Oregon.—Influenza: By counties—Benton 33, Clackamas 52, Columbia 8, Gilliam 50, Hood River 16, Jackson 13, Jefferson 6, Josephine 40, Lane 63, Lincoln 14, Linn 63 (and 3 deaths), Marion 56, Multnomah 14, Polk 6, Tillamook 38, Wasco 98 (and 3 deaths), Washington 81, Curry 2 deaths; total cases in State 1,563; total deaths in State 7.

Vermont.—Influenza, 911 cases from 43 towns. No other unusual occurrence.

Virginia.—Influenza 482 cases. Situation very bad in many counties.

Washington.—No unusual outbreak of disease. Influenza, 1,680 cases entire State; 550 more cases than preceding week. Nine cases smallpox in Thurston County.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Camp Devens zone, Mass.	1	Portsmouth and Norfolk County health district, Va.	2
Camp Lee zone, Va.	1		

State Reports for November, 1918.

Place.	New cases reported.	Place.	New cases reported.
New York:		New York—Continued:	
Chautauqua County—		Westchester County—	
Jamestown	1	Port Chester	1
Greene County—		Total	10
Catskill	1		
Monroe County—		Ohio:	
Rochester	2	Ashtabula County	1
Niagara County—		Cuyahoga County	3
Niagara Falls	1	Hamilton County	2
Schenectady County—		Miami County	1
Schenectady	1	Wayne County	1
Ulster County—		Total	8
Lloyd (town)	2		
Wayne County—			
Ontario (town)	1		

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CEREBROSPINAL MENINGITIS—Continued.

City Reports for Week Ended Dec. 28, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga	1	1	Indianapolis, Ind	1	1
Baltimore, Md	1		Little Rock, Ark	1	
Birmingham, Ala	1		Los Angeles, Cal	1	
Boston, Mass		2	Louisville, Ky		1
Buffalo, N. Y		1	Malden, Mass	1	2
Charlotte, N. C	1		Milwaukee, Wis	3	3
Chicago, Ill	1		Minneapolis, Minn	1	
Danville, Va		1	Muncie, Ind	1	1
Detroit, Mich		1	Nashville, Tenn	1	1
Duluth, Minn	1	1	Newark, N. J	1	
Durham, N. C	1		New York, N. Y	9	4
Galesburg, Ill		1	Philadelphia, Pa	1	
Green Bay, Wis	1	1	Schenectady, N. Y	1	
Holland, Mich		1			

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	1	Camp Lee zone, Va	1
Camp Doniphan zone, Okla	1	Camp McClellan zone, Ala	1
Camp Greene zone, N. C	1	Camp Sheridan zone, Ala	2
Camp Joseph E. Johnston zone, Fla	2	Camp Travis zone, Tex	2

DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	1	Camp Logan zone, Tex	1
Charleston sanitary district, S. C	4	Camp MacArthur zone, Tex	1
Camp Dodge zone, Iowa	3	Camp Merritt zone, N. J	1
Camp Funston zone, Kans	1	Portsmouth and Norfolk County health district, Va	10
Camp Gordon zone, Ga	4	Camp Sevier zone, S. C	2
Camp Greene zone, N. C	1	Camp Zachary Taylor zone, Ky. and Ind	10
Camp Jackson zone, S. C	3	Camp Wheeler zone, Ga	1
Fort Leavenworth zone, Kans	2		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 91.

ERYSIPELAS.

City Reports for Week Ended Dec. 28, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md	1	1	Muncie, Ind	1	1
Brockton, Mass	1		New Haven, Conn	2	
Buffalo, N. Y	2		New York, N. Y		1
Chicago, Ill	9	1	Omaha, Nebr	1	
Council Bluffs, Iowa		1	Philadelphia, Pa	8	2
Denver, Colo	1		Pontiac, Mich	1	
Detroit, Mich	4		Providence, R. I		1
Englewood, N. J	1		Rochester, N. Y	1	
Freeport, Ill	1		St. Louis, Mo	4	
Highland Park, Mich	2		San Francisco, Cal	2	
Joplin, Mo	1		Springfield, Ohio	1	1
Kalamazoo, Mich	2	1	Tacoma, Wash	1	
Los Angeles, Cal	5		Toledo, Ohio		1
Moundsville, W. Va	1				

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GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.
Camp Bowie zone, Tex	7
Camp Doniphan zone, Okla	7
Camp Funston zone, Kans	1
Camp Gordon zone, Ga	12
Camp Greene zone, N. C	4
Gulfport health district, Miss	5
Camp Jackson zone, S. C	4
Camp Joseph E. Johnston zone, Fla	30
Camp Lee zone, Va	4
Camp Logan zone, Tex	2
Camp McClellan zone, Ala	6
Fort Oglethorpe zone, Ga. and Tenn	34
Camp Pike zone, Ark	5
Camp Sheridan zone, Ala	9
Camp Sherman zone, Ohio	10
Camp Zachary Taylor zone, Ky. and Ind	56
Tidewater health district, Va	8
Camp Travis zone, Tex	15
Camp Wadsworth zone, S. C	9

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.
Camp Bowie zone, Tex	18
Bremerton zone, Wash	244
Charleston sanitary district, S. C	97
Camp Devens zone, Mass	57
Camp Dix zone, N. J	4
Camp Dodge zone, Iowa	12
Camp Doniphan zone, Okla	1
Camp Eberts zone, Ark	50
Camp Funston zone, Kans	82
Gas and Flame School zone, Ga. and Ala	129
Gerstner Field zone, La	75
Camp Gordon zone, Ga	113
Camp Greene zone, N. C	46
Gulfport health district, Miss	743
Camp Hancock zone, Ga	537
Camp Humphreys zone, Va	105
Camp Jackson zone, S. C	5
Camp Joseph E. Johnston zone, Fla	39
Fort Leavenworth zone, Kans	24
Camp Lee zone, Va	398
Camp Lewis zone, Wash	25
Camp Logan zone, Tex	12
Camp MacArthur zone, Tex	10
Camp McClellan zone, Ala	26
Camp Merritt zone, N. J	95
Fort Oglethorpe zone, Ga. and Tenn	29
Picric Acid Plant zone, Ga	15
Camp Pike zone, Ark	241
Portsmouth and Norfolk County health district, Va	465
Portsmouth-Kittery sanitary district, N. H. and Me	79
Camp Sevier zone, S. C	288
Camp Sheridan zone, Ala	15
Camp Sherman zone, Ohio	5
Camp Zachary Taylor zone, Ky. and Ind	284
Tidewater health district, Va	9
Camp Travis zone, Tex	203
Vancouver zone, Wash	186
Camp Wadsworth zone, S. C	34
Camp Wheeler zone, Ga	75
Wilmington sanitary district, N. C	37

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.
Gulfport health district, Miss	9
Camp Pike zone, Ark	1

Ohio Report for November, 1918.

During the month of November 6 cases of malaria were reported in Ohio—5 in Harrison County and 1 in Hamilton County.

City Reports for Week Ended Dec. 28, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass	1	.....	Mobile, Ala	.....	1
Columbus, Ga	2	1	Savannah, Ga	.....	1
Joplin, Mo	2	.....	Tuscaloosa, Ala	2	.....

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MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	3	Picric Acid Plant zone, Ga	8
Bremerton zone, Wash	2	Camp Pike zone, Ark	3
Camp Funston zone, Kans	1	Portsmouth and Norfolk County health district, Va	9
Gas and Flame School zone, Ga. and Ala	5	Camp Sheridan zone, Ala	1
Camp Gordon zone, Ga	3	Camp Zachary Taylor zone, Ky. and Ind	3
Camp Jackson zone, S. C	3	Tidewater health district, Va	2
Camp Joseph E. Johnston zone, Fla	20	Camp Travis zone, Tex	3
Fort Leavenworth zone, Kans	1	Camp Wadsworth zone, S. C	1
Camp Lee zone, Va	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 91.

PELLAGRA.

City Reports for Week Ended Dec. 28, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga		1	Memphis, Tenn	2	
Birmingham, Ala		2	Mobile, Ala		1
Charlotte, N. C		1	Nashville, Tenn	1	1
Columbus, Ga	3	2	Richmond, Va		2
Greensboro, N. C		1	Tuscaloosa, Ala	1	
Houston, Tex		1	Wilmington, N. C	1	
Little Rock, Ark		1	Winston-Salem, N. C	1	1
Lynchburg, Va		1			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for November, 1918.

Place	New cases reported.	Place.	New cases reported.
New York:		Ohio:	
Chautauqua County—		Darke County	1
Jamestown	1	Muskingum County	1
Monroe County—		Fairfield County	1
Rochester	1	Total	3
Total	2	Washington:	
		Pierce County	1

City Reports for Week Ended Dec. 28, 1918.

During the week ended December 28, 1918, poliomyelitis was reported as follows: Chelsea, Mass., one case and one death; Salt Lake City, Utah, two deaths; Saratoga Springs, N. Y., one case and one death.

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PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.
Camp Bowie zone, Tex	15
Camp Funston zone, Kans	1
Gas and Flame School zone, Ga. and Ala	3
Gerstner Field zone, La	8
Camp Gordon zone, Ga	1
Gulfport health district, Miss	22
Camp Humphreys zone, Va	7
Camp Jackson zone, S. C	2
Camp Joseph E. Johnston zone, Fla	2
Camp Lee zone, Va	25
Camp Logan zone, Tex	2
Camp MacArthur zone, Tex	3
Camp McClellan zone, Ala	1
Camp Merritt zone, N. J	1
Camp Pike zone, Ark	37
Portsmouth and Norfolk County health district, Va	3
Camp Sevier zone, S. C	16
Camp Sherman zone, Ohio	1
Camp Zachary Taylor zone, Ky. and Ind	1
Camp Travis zone, Tex	3
Camp Upton zone, N. Y	5
Camp Wheeler zone, Ga	2
Wilmington sanitary district, N. C	5

City Reports for Week Ended Dec. 28, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Adrian, Mich	1		Little Rock, Ark	11	3
Alameda, Cal	1		Long Branch, N. J	1	1
Asbury Park, N. J	1	1	Los Angeles, Cal	23	10
Atlantic City, N. J	2	1	Louisville, Ky	4	22
Attleboro, Mass	2	1	Lowell, Mass	4	5
Baltimore, Md	25	34	Malden, Mass	3	3
Battle Creek, Mich	4		Manchester, Conn	1	
Bellaire, Ohio	2		Manitowoc, Wis	2	1
Belleville, N. J	2		Marion, Ohio	8	
Beverly, Mass	1		Melrose, Mass	3	
Binghamton, N. Y	2		Middletown, N. Y	1	1
Bloomfield, N. J	2		Montclair, N. J	5	2
Boston, Mass	72	30	Montgomery, Ala	1	6
Bristol, Conn	1		Morgantown, W. Va	2	1
Brockton, Mass	5	1	Morristown, N. J	1	7
Burlington, Vt	1	1	Mount Vernon, N. Y	6	3
Camden, N. J	3		Muncie, Ind	1	1
Canton, Ill	3	1	New Bedford, Mass	1	3
Centralia, Ill	5	1	Newburyport, Mass	1	
Charleston, W. Va	1	2	Newport, Ky	1	1
Chelsea, Mass	4		Newton, Mass	1	2
Chicago, Ill	567	158	New York, N. Y	396	419
Chillicothe, Ohio	1	1	Norfolk, Va	4	4
Cleveland, Ohio	94	69	Northampton, Mass	2	3
Columbus, Ga	4	3	North Attleboro, Mass	5	7
Cranston, R. I	1	1	Norwich, Conn	1	3
Dayton, Ohio	6	5	Norwood, Ohio	1	1
Detroit, Mich	80	73	Orange, N. J	3	7
Duluth, Minn	6	3	Ossining, N. Y	7	1
East Orange, N. J	13	4	Oswego, N. Y	2	
Elmira, N. Y	12	3	Parkersburg, W. Va	3	3
El Paso, Tex	7	7	Pasadena, Cal	5	
Englewood, N. J	3		Passaic, N. J	2	3
Everett, Wash	12		Peabody, Mass	1	
Fall River, Mass	6	3	Peoria, Ill	21	6
Findlay, Ohio	1	1	Philadelphia, Pa	105	47
Flint, Mich	5	5	Piqua, Ohio	2	1
Framingham, Mass	2	1	Plattsburgh, N. Y	4	7
Freeport, Ill	15	7	Pontiac, Mich	9	2
Galveston, Tex	1	2	Port Chester, N. Y	5	2
Geneva, N. Y	1		Quincy, Ill	3	6
Grand Forks, N. Dak	4	4	Quincy, Mass	1	1
Grand Rapids, Mich	24	13	Rochester, N. Y	29	6
Greenfield, Mass	2		Rome, N. Y	5	
Greensboro, N. C	3	6	San Antonio, Tex	9	5
Greenwich, Conn	4	2	San Diego, Cal	14	2
Hackensack, N. J	3	8	Sandusky, Ohio	6	6
Hamilton, Ohio	2	4	San Francisco, Cal	23	14
Haverhill, Mass	15	8	Schenectady, N. Y	1	
Highland Park, Mich	9	6	Sioux Falls, S. Dak	8	5
Hoboken, N. J	2	6	Somerville, Mass	1	1
Independence, Mo	2	1	Springfield, Mass	22	10
Ithaca, N. Y	1	1	Stockton, Cal	15	12
Jamestown, N. Y	7	2	Trenton, N. J	2	2
Jersey City, N. J	9		Waco, Tex	1	1
Joplin, Mo	5		Waterbury, Conn	3	
Kalamazoo, Mich	17	8	West Orange, N. J	2	2
Kansas City, Kans	6		Wilmington, Del	7	7
Kansas City, Mo	18	24	Wilmington, N. C	2	3
Kearny, N. J	4	1	Winthrop, Mass	1	1
Lackawanna, N. Y	12	8	Worcester, Mass	25	
Lawrence, Mass	1	3	Yonkers, N. Y	10	3
Lincoln, Nebr	1				

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RABIES IN ANIMALS.

City Reports for Week Ended Dec. 28, 1918.

Place.	Cases.	Place.	Cases.
Jacksonville, Ill	1	St. Paul, Minn	1
Kansas City, Mo	1	San Antonio, Tex	2
Rochester, N. Y	1		

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	6	Camp Pike zone, Ark	3
Camp Funston zone, Kans	1	Portsmouth and Norfolk County health district, Va	1
Gas and Flame School zone, Ga. and Ala	1	Camp Sevier zone, S. C	1
Camp Gordon zone, Ga	2	Camp Sherman zone, Ohio	2
Camp Greene zone, N. C	2	Camp Zachary Taylor zone, Ky. and Ind	2
Camp Joseph E. Johnston zone, Fla	1	Tidewater health district, Va	1
Camp Merritt zone, N. J	2		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 91.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	3	Camp Gordon zone, Ga	30
Camp Doniphan zone, Okla	5	Picric Acid Plant zone, Ga	3
Gas and Flame School zone, Ga. and Ala	3	Portsmouth and Norfolk County health district, Va	3
Gerstner Field zone, La	6		

State Reports for November, 1918—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
New York:						
Erie County—						
Buffalo	3					3
Washington County—						
Granville	1		1			
Wyoming County—						
Warsaw	1				1	
Total	5		1		1	3
Ohio:						
Belmont County	2					2
Butler County	46				19	27
Clark County	1					1
Columbiana County	3		2		1	
Coshocton County	9					9
Crawford County	16		2		5	9
Cuyahoga County	132					132
Fayette County	3				2	1
Franklin County	6				5	1
Fulton County	1					1
Geauga County	1					1
Guernsey County	5					5
Hamilton County	4		1			3
Hancock County	1				1	

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SMALLPOX—Continued.

State Reports for November, 1918—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Ohio—Continued.						
Harrison County	1					1
Highland County	8				8	
Jefferson County	12				11	1
Knox County	2					2
Lorain County	40		2	1	8	29
Lucas County	3		1			2
Marion County	6					6
Mercer County	1					1
Montgomery County	5					5
Morrow County	4					4
Muskingum County	9				2	7
Paulding County	93				28	65
Preble County	5					5
Sandusky County	1				1	
Seneca County	3				3	
Stark County	1					1
Trumbull County	2				1	1
Warren County	3					3
Wayne County	4			2		2
Wyandot County	7					7
Total	439		8	3	94	334

State Reports for November and December, 1918.

Place.	Cases.	Deaths.
Arizona (December):		
Maricopa County	1	
Vermont (December):		
Essex County	1	
Washington (November):		
Chelan County	1	
Clarke County—		
Vancouver	2	
Grays Harbor County—		
Hoquiam	4	
King County—		
Auburn	1	
Seattle	16	
Kittitas County	5	
Ellensburg	3	
Lewis County	14	
Lincoln County	1	
Washington (November)—Continued.		
Pacific County—		
Ilwaco	4	
Pierce County	3	
Tacoma	6	
Wilkeson	2	
Snohomish County—		
Arlington	1	
Spokane County	1	
Rockford	16	
Spokane	11	
Walla Walla County	2	
Whitman County—		
Colfax	4	
Palouse	2	
Yakima County	10	
Yakima	14	
Total	128	

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SMALLPOX—Continued.

City Reports for Week Ended Dec. 28, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Adrian, Mich.	8		Milwaukee, Wis.	2	
Alexandria, La.	1		Minneapolis, Minn.	5	
Atlanta, Ga.	6		Mobile, Ala.	2	
Austin, Tex.	1		Muncie, Ind.	4	
Birmingham, Ala.	1		Muskogee, Okla.	1	
Boise, Idaho.	1		Nashville, Tenn.	1	
Buffalo, N. Y.	4		Norfolk, Va.	2	
Charlotte, N. C.	1		North Yakima, Wash.	5	
Cleveland, Ohio.	2		Ogden, Utah.	4	
Colorado Springs, Colo.	2		Oklahoma City, Okla.	1	
Columbus, Ga.	3		Omaha, Nebr.	10	
Columbus, Ohio.	1		Oshkosh, Wis.	2	
Corpus Christi, Tex.	4		Pekin, Ill.	1	
Council Bluffs, Iowa.	9		Peoria, Ill.	14	
Dayton, Ohio.	4		Pontiac, Mich.	1	
Denver, Colo.	10		Portland, Oreg.	5	
Elgin, Ill.	15		Raleigh, N. C.	1	
Grand Forks, N. Dak.	1		St. Paul, Minn.	16	
Greensboro, N. C.	6		Salt Lake City, Utah.	2	
Hamilton, Ohio.	12		Seattle, Wash.	3	
Indianapolis, Ind.	3		Sioux Falls, S. Dak.	1	
Joplin, Mo.	1		Spokane, Wash.	3	
Kansas City, Kans.	1		Steubenville, Ohio.	3	
Kansas City, Mo.	2		Superior, Wis.	4	
Knoxville, Tenn.	1		Toledo, Ohio.	1	
Long Beach, Cal.	1		Tuscaloosa, Ala.	1	
Los Angeles, Cal.	2		Vancouver, Wash.	1	
Marion, Ohio.	3		Wichita, Kans.	1	
Marshalltown, Iowa.	1		Wilmington, N. C.	1	
Memphis, Tenn.	1		Winston-Salem, N. C.	6	
Middletown, Ohio.	2		Zanesville, Ohio.	2	

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex.	3	Camp McClellan zone, Ala.	2
Gas and Flame School zone, Ga. and Ala.	7	Fort Oglethorpe zone, Ga. and Tenn.	43
Camp Gordon zone, Ga.	15	Camp Pike zone, Ark.	1
Camp Greene zone, N. C.	2	Camp Sheridan zone, Ala.	7
Camp Jackson zone, S. C.	11	Camp Zachary Taylor zone, Ky. and Ind.	39
Camp Joseph E. Johnston zone, Fla.	21	Tidewater health district, Va.	1
Camp Lee zone, Va.	1	Camp Travis zone, Tex.	5

TETANUS.

City Reports for Week Ended Dec. 28, 1918.

During the week ended December 28, 1918, two deaths from tetanus were reported; one at Decatur, Ill., and one at Savannah, Ga.

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Gas and Flame School zone, Ga. and Ala.	2	Camp Sevier zone, S. C.	3
Camp Humphreys zone, Va.	2	Camp Zachary Taylor zone, Ky. and Ind.	5
Camp Jackson zone, S. C.	1	Tidewater health district, Va.	2
Camp Joseph E. Johnston zone, Fla.	5	Camp Travis zone, Tex.	5
Camp MacArthur zone, Tex.	3	Vancouver zone, Wash.	1
Camp Pike zone, Ark.	3		

See also, Diphtheria, measles, scarlet fever, and tuberculosis, page 91.

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TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 11, 1919.

	Cases.		Cases.
Camp Joseph E. Johnston zone, Fla	1	Tidewater health district, Va	3
Camp Zachary Taylor zone, Ky. and Ind	1	Camp Travis zone, Tex	3

State Reports for November and December, 1918.

Place.	New cases reported.
Arizona (December):	
Maricopa County	3
Cochise County	2
Gila County	1
Total	6
New York (November):	
Albany County—	
Albany	2
Watervliet	3
Allegany County—	
Andover	1
Wellsville	1
Broome County—	
Binghamton	1
Cattaraugus County—	
Olean	3
Cayuga County—	
Auburn	1
Moravia	1
Chemung County—	
Elmira	1
Cortland County—	
Cortland	2
Delaware County—	
Walton (town)	1
Dutchess County—	
Poughkeepsie (town)	1
Erie County—	
Buffalo	4
Tonawanda	1
Essex County—	
Ticonderoga (town)	1
Fulton County—	
Stratford (town)	1
Greene County—	
Greenville (town)	1
Herkimer County—	
Frankfort	1
Ilion	11
Herkimer	25
Schuyler (town)	1
Jefferson County—	
Watertown	4
Carthage	3
Livingston County—	
Caledonia (town)	2
Monroe County—	
Rochester	1
Riga (town)	1
Niagara County—	
Lockport	2
North Tonawanda	1
Oneida County—	
Rome	1
Utica	3
Onondaga County—	
Syracuse	6
Elbridge (town)	1
Salina (town)	3
Orange County—	
Middletown	2
Oswego County—	
Oswego	2
Otsego County—	
Exeter (town)	1
St. Lawrence County—	
Ogdensburg	1
Saratoga County—	
Saratoga Springs	1
New York (November)—Continued.	
Schuyler County—	
Watkins	1
Seneca County—	
Waterloo	2
Waterloo (town)	2
Steuben County—	
Corning	3
Suffolk County—	
Huntington (town)	2
Smithtown (town)	1
Central Islip S. H	2
Kings Park S. H	1
Sullivan County—	
Callicoon (town)	1
Delaware (town)	1
Fallsburg (town)	1
Liberty	1
Neversink (town)	4
Tioga County—	
Richford (town)	1
Ulster County—	
Kingston	20
Saugerties (town)	1
Wayne County—	
Williamson (town)	1
Westchester County—	
Yonkers	1
Total	150
Ohio (November):	
Ashtabula County	1
Auglaize County	3
Belmont County	4
Butler County	3
Carroll County	2
Champaign County	1
Clark County	1
Clermont County	1
Columbiana County	2
Crawford County	4
Cuyahoga County	4
Delaware County	1
Erie County	2
Fayette County	1
Franklin County	2
Geauga County	1
Greene County	2
Hamilton County	7
Hardin County	1
Harrison County	5
Highland County	2
Jefferson County	1
Lawrence County	8
Licking County	2
Logan County	1
Lucas County	3
Marion County	5
Medina County	1
Mercer County	1
Miami County	5
Montgomery County	1
Muskingum County	1
Perry County	1
Ross County	6
Sandusky County	4
Scioto County	3
Seneca County	2
Shelby County	1
Summit County	3

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TYPHOID FEVER—Continued.

State Reports for November and December, 1918—Continued.

Place.	New cases reported.
Ohio (November)—Continued.	
Trumbull County	1
Union County	1
Warren County	1
Wood County	3
Total	110
Vermont (December):	
Addison County	1
Franklin County	1
Orange County	1
Total	3
Washington (November):	
Chelan County	2
Garfield County	1
Grays Harbor County—Hoquiam	1
Kittitas County	2
Skagit County—Mount Vernon	5
Spokane County—Rockford	1
Spokane	3
Walla Walla County	4
Waitsburg	1
Whitman County—Garfield	1
Yakima County	2
Total	23

City Reports for Week Ended Dec. 28, 1918.

Place.	Cases.	Deaths.
Baltimore, Md	2	1
Bloomfield, N. J	1	
Boston, Mass	1	
Brockton, Mass	1	
Burlington, Vt	1	
Cambridge, Mass	1	
Camden, N. J	1	
Charleston, S. C	1	
Charlotte, N. C	1	
Chicago, Ill	2	
Cleveland, Ohio	2	1
Columbia, S. C	1	
Corning, N. Y	1	
Detroit, Mich	2	
Durham, N. C		1
Fall River, Mass	1	
Grand Rapids, Mich	1	
Greensboro, N. C	1	
Holyoke, Mass	1	
Houston, Tex	1	
Kalamazoo, Mich	1	1
Kansas City, Kans	1	
Kansas City, Mo	1	1
Lawrence, Mass	1	1
Long Branch, N. J	1	
Los Angeles, Cal	9	
Marion, Ind		1
Muncie, Ind	2	1
Nashville, Tenn	1	
Newark, Ohio	2	
New Bedford, Mass	1	
New Haven, Conn	2	
New York, N. Y	18	2
Northampton, Mass		1
North Tonawanda, N. Y		1
Oswego, N. Y	1	
Philadelphia, Pa	1	1
Piqua, Ohio	1	
Roanoke, Va	1	1
St. Paul, Minn	3	
San Antonio, Tex	1	
Savannah, Ga	1	
Superior, Wis		1
Washington, D. C	1	
Wilmington, N. C	1	

TYPHUS FEVER.

City Report for Week Ended Dec. 28, 1918.

There was one death from typhus fever reported at Cleveland, Ohio, during the week ended December 28, 1918.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for November and December, 1918.

State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.
Arizona (December)	1		1
New York (November)	464	347	344
Ohio (November)	462	150	302
Vermont (December)	35	83	25
Washington (November)	53	12	46

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 28, 1918.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams, Mass	14,406	1								
Akron, Ohio	98,804	48	2		1		4		22	
Alameda, Cal	28,433	14								1
Alexandria, La	16,232	7			7					
Anderson, Ind	24,230	8								2
Ann Arbor, Mich	15,041	6					8			
Ansonia, Conn	16,954	10								
Appleton, Wis	18,026	7								
Asbury Park, N. J	14,629	4	1							
Ashtabula, Ohio	22,008	7								
Atlanta, Ga	198,144	75					2		1	1
Atlantic City, N. J	59,515	21							1	2
Attleboro, Mass	19,776	10								
Austin, Tex	35,612	5								
Bakersfield, Cal	17,543								1	1
Baltimore, Md	594,637	225	22	3	7		8		22	27
Bangor, Me	26,958	2								
Barre, Vt	12,401	6								3
Battle Creek, Mich	30,159	2	3		1		1			
Bayonne, N. J	72,204		7				1		1	
Beatrice, Nebr	10,437	17								1
Bedford, Ind	10,613							1		
Bellaire, Ohio	14,575	12								
Belleville, N. J	12,797				1		1			
Beloit, Wis	18,547	5			1					
Benton Harbor, Mich	11,080	4	1							
Berkeley, Cal	60,427	23	2							1
Beverly, Mass	22,128	5								
Biddeford, Me	17,780	13								
Billings, Mont	15,123						1		10	1
Binghamton, N. Y	54,884	10	2	1			2		1	
Birmingham, Ala	188,716	98	3		3		5		6	7
Bloomfield, N. J	19,613	1								
Boise, Idaho	35,961	11			1					
Boston, Mass	767,813	441	40	5	8		12	1	28	28
Brazil, Ind	10,472	4								
Bridgeport, Conn	124,724	51	9	1	4				3	3
Bristol, Conn	16,318	2					3			
Brockton, Mass	69,152	24					1		2	1
Brookline, Mass	33,528	11					3			
Buffalo, N. Y	475,781	186	37	1	16	1	16	1	28	13
Burlington, Iowa	25,144	14					2			2
Burlington, Vt	21,802	13	1		2					
Butte, Mont	44,057				1		2			
Cairo, Ill	15,886	6								1
Cambridge, Mass	114,283	52	1		1					4
Camden, N. J	108,117		3				5		3	
Canton, Ohio	62,568	26	2		2				1	2
Centralia, Ill	11,838	1	1							
Champaign, Ill	15,052	6								
Chanute, Kans	12,968	2								
Charleston, S. C	61,941	25	2						1	2
Charleston, W. Va	31,080	12								2
Charlotte, N. C	40,759	17								1
Chelsea, Mass	66,405	8	1		1		1		3	2
Cheyenne, Wyo	[1] 11,320				1					
Chicago, Ill	2,547,201	1,089	117	19	30	4	26		105	61
Chicopee, Mass	29,960	12	3	1						2
Chillicothe, Ohio	15,625	6	1		1		2			
Cincinnati, Ohio	414,248	194	7	2	1		3		18	23
Clarksburg, W. Va	12,960	6	2							
Cleveland, Ohio	692,259	342	11		5		2		10	23
Clinton, Mass	[1] 13,075	5							2	2
Coffeyville, Kans	18,331						1			
Cohoes, N. Y	25,292	14					1		5	
Colorado Springs, Colo	28,965	24							2	7
Columbus, Ga	26,308	12			1				4	2
Columbus, Ohio	229,125	70			3		5		4	6
Concord, N. H	22,858	27					1			
Corning, N. Y	15,678	4	2							
Corpus Christi, Tex	10,789	5								

[1] Population Apr. 15, 1920.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 28, 1918—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Council Bluffs, Iowa	31,898	15	1							
Covington, Ky	59,628	12	1				1		2	1
Cranston, R. I	28,773	5					1			
Cumberland, R. I	10,965									1
Danville, Ill	33,960	16								
Danville, Va	20,188	12								1
Dayton, Ohio	126,999	46	4				1		5	
Dedham, Mass	16,618	3								
Denver, Colo	268,499	140	1				11			15
Detroit, Mich	619,662	358	82	8	4	1	34	1	17	20
Dover, N. H	13,376	5								
Duluth, Minn	97,677	29	2							1
Dunkirk, N. Y	21,311	12							2	
Durham, N. C	26,169	2								
East Chicago, Ind	39,236	12								
East Cleveland, Ohio	13,864		1							
Easthampton, Mass	16,656	1							2	1
East Orange, N. J	68,701	18	2	1			1			
East Providence, R. I	19,435						2			
Elgin, Ill	28,362	12								
Elizabeth, N. J	88,830		6	1			3		1	1
Elmira, N. Y	38,272	28								
El Paso, Tex	69,142	44	3		8					5
Englewood, N. J	12,668	1	1							1
Escanaba, Mich	15,854	11							1	
Eureka, Cal	15,142	2								
Evanston, Ill	39,264	10	1							
Everett, Mass	48,369	13	4							
Fall River, Mass	128,826	51	5	1	8	1	2		4	5
Fargo, N. Dak	17,972	12	1							
Findlay, Ohio	[1] 14,668	8								
Flint, Mich	57,266	22	4	1						
Fond du Lac, Wis	21,426	6								
Fort Scott, Kans	10,764	6								
Framingham, Mass	14,149	12	1						4	
Frederick, Md	11,295	9								
Freeport, Ill	19,844	15								1
Galesburg, Ill	24,629	10			5					
Galveston, Tex	42,650	13								2
Geneva, N. Y	13,915	4								
Grand Forks, N. Dak	16,342		1	1						
Grand Rapids, Mich	132,861	56	3	1	3		2		2	
Green Bay, Wis	30,017	20	1						1	1
Greenfield, Mass	12,251	4	1		4					
Greensboro, N. C	20,171	16	2							
Greenwich, Conn	19,594						3			2
Hackensack, N. J	17,412	15								
Hamilton, Ohio	41,338	10							2	
Hammond, Ind	27,010	17								1
Hattiesburg, Miss	12,357		2							
Haverhill, Mass	49,180	28	4		1				4	1
Henderson, Ky	12,312	6								1
Highland Park, Mich	32,859	9	5		1					
Hoboken, N. J	78,224	16	1							
Holland, Mich	12,459	9								2
Holyoke, Mass	66,598	22			2		5		1	2
Houston, Tex	116,578	49	3							4
Independence, Kans	14,111	8							1	
Indianapolis, Ind	263,622	164	17	2	6		3		1	9
Ithaca, N. Y	16,617						2			
Jacksonville, Ill	15,506	8								1
Jamestown, N. Y	37,421	5	1							
Janesville, Wis	14,411	10					1			
Jersey City, N. J	322,357		29				10		5	
Joplin, Mo	35,400	9	1						5	
Kalamazoo, Mich	50,498	37	2						4	4
Kansas City, Kans	102,696		3						2	
Kansas City, Mo	285,516	163	3	2			1	1		7
Kearny, N. J	24,295	9	1				3		1	2
Knoxville, Tenn	88,122		1				1			

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 28, 1918—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Kokomo, Ind	21,929	13								
Lackawanna, N. Y	16,219	14	1		14				1	
La Crosse, Wis	31,835	16	1				1			1
La Fayette, Ind	21,481	6					1			
Lawrence, Kans	13,477	3								
Lawrence, Mass	102,923		2						6	3
Leavenworth, Kans	[1] 19,363	5	1						1	
Lima, Ohio	37,145	28					2			
Lincoln, Nebr	46,957	23	3				4			1
Lincoln, R. I	10,473				3					
Little Rock, Ark	58,716	19	1		1				5	
Logansport, Ind	21,338	8					1			
Long Beach, Cal	29,163	12	1				1			
Long Branch, N. J	15,733	3								2
Los Angeles, Cal	535,485	261	22	3	2		1		35	23
Louisville, Ky	240,808	93	5	1	4		1		9	7
Lowell, Mass	114,366	49	7		5		11		4	7
Lynchburg, Va	33,497	17								1
Malden, Mass	52,243	24		1			1		1	
Manchester, Conn	15,859	3	3		9		2			
Manchester, N. H	79,607	33	4	1			2		12	2
Manitowoc, Wis	13,931	2	1		1					
Marinette, Wis	[1] 14,610	12								1
Marion, Ind	19,923	10	3	1	1		4			
Marquette, Mich	12,555	1								
Marshalltown, Iowa	14,519		1							
Mason City, Iowa	14,938	15								
Massillon, Ohio	15,509	7								
Medford, Mass	26,681	18								
Melrose, Mass	17,724	5								
Memphis, Tenn	151,877	55	4		1				12	5
Middletown, Conn	13,502				14		1		1	
Middletown, Ohio	16,584	8								1
Milford, Mass	14,280	4								
Milwaukee, Wis	445,008	216	14	1	1		13	2		10
Minneapolis, Minn	373,448	161	9				8	1	11	12
Missoula, Mont	19,075	10			1					
Mobile, Ala	59,201	28		1	1					2
Montclair, N. J	27,087									1
Montgomery, Ala	44,039	20		1			1			
Morgantown, W. Va	14,444	2								
Morristown, N. J	13,410	15								
Moundsville, W. Va	11,513	4					2		1	1
Mount Vernon, N. Y	37,991	15	1						1	1
Mount Vernon, Ohio	10,877	7								1
Muncie, Ind	25,653	4	1						1	
Nashua, N. H	27,541	9	1				4			
Nashville, Tenn	118,136	49	3		12		1		4	1
Newark, N. J	418,789		14		2		9		20	
Newark, Ohio	30,317	3	1							
New Bedford, Mass	121,622	41	2	1	1				9	2
New Britain, Conn	55,385	15	2				2			2
Newburyport, Mass	15,291	7								
New Haven, Conn	152,275	57	11		5		1	1	8	1
New Orleans, La	377,010	171	8		1		2		26	26
Newport, Ky	32,133	7								
Newport, R. I	30,585	5	1				3			1
Newton, Mass	44,345	19	3				1			2
New York, N. Y	5,737,492		249	29	21		87	1	75	139
Niagara Falls, N. Y	38,466	31	2		2		2			
Norfolk, Va	91,148		5		1					
North Adams, Mass	[1] 22,019	5								1
Northampton, Mass	20,008	20	1							1
North Attleboro, Mass	11,248	11								
North Tonawanda, N. Y	14,060	5			1					
North Yakima, Wash	22,058						1		1	
Norwich, Conn	21,923	1	3						2	
Norwood, Ohio	23,269	4			1					1
Oakland, Cal	206,405	107	4				1		3	6
Ogden, Utah	32,343	11	1							

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 28, 1918—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Oklahoma City, Okla	97,588	34								
Olean, N. Y	16,927	7								
Omaha, Nebr	177,777	85	3		4		3			5
Orange, Conn	14,898	10								
Orange, N. J	33,636	20	2		1				1	
Oshkosh, Wis	36,549	7								
Ossining, N. Y	14,984	11	1						1	
Oswego, N. Y	24,219		1				2		2	
Parkersburg, W. Va	21,959	10							1	1
Pasadena, Cal	40,630	20								
Passaic, N. J	74,478	26	5						1	4
Peabody, Mass	18,785	4			11					
Peekskill, N. Y	19,984	6								
Pekin, Ill	10,976		2							
Peoria, Ill	72,184	51			1		2			1
Perth Amboy, N. J	42,646	12	1							2
Philadelphia, Pa	1,735,514	535	65	6	12		24	1	104	59
Piqua, Ohio	14,875	5								
Pittsfield, Mass	39,676	23								1
Plainfield, N. J	24,289	19					1			1
Plattsburg, N. Y	13,111	15								
Plymouth, Mass	14,001	14								1
Pocatello, Idaho	12,695	3								
Pomona, Cal	13,984	4								
Pontiac, Mich	16,666	6	2							
Port Chester, N. Y	16,727	12					1			
Portland, Me	64,780	17					6			
Portland, Oreg	296,999	94	6	2	8		1		1	4
Portsmouth, N. H	11,780								1	
Portsmouth, Va	40,998		2						1	
Poughkeepsie, N. Y	30,765	9	2	1						1
Providence, R. I	250,695	125	11	1			10			7
Quincy, Ill	36,962				1					
Quincy, Mass	39,982	12	4				1		1	2
Raleigh, N. C	20,274	12								
Redlands, Cal	14,578	4					3			
Richmond, Va	158,702	103	2		3		2		6	9
Riverside, Cal	20,496						1		1	
Roanoke, Va	46,262	20							1	
Rochester, N. Y	294,714	129	4	3			7	1	2	6
Rockford, Ill	56,739	19	2							1
Rocky Mount, N. C	12,672	7								1
Rome, N. Y	24,259								1	
Rutland, Vt	15,038	5								
Sacramento, Cal	68,964	64	1						3	3
Saginaw, Mich	56,469	29	4	2	3		1			4
St. Joseph, Mo	86,498	49	4				4		1	
St. Louis, Mo	768,630	284	57	1	2		7		24	15
St. Paul, Minn	252,465	84	34	1	2		10		7	5
Salt Lake City, Utah	121,623	37	5		2		2			1
San Angelo, Tex	[1] 10,321	6								4
San Antonio, Tex	128,215	11	1				1		11	6
San Diego, Cal	56,412	49	1	1					9	4
Sandusky, Ohio	20,226	12							1	1
Sanford, Me	11,217	2								
San Francisco, Cal	471,023	349	12	1			6	1	22	12
San Jose, Cal	39,810						1			
Santa Barbara, Cal	15,360	9	1	1						
Santa Cruz, Cal	15,150	5								
Saratoga Springs, N. Y	13,839	6								
Sault Ste. Marie, Mich	14,130	2					1			
Savannah, Ga	69,250	25	1						1	4
Schenectady, N. Y	103,774	43	3				1			2
Seattle, Wash	366,445		5				8			
Sioux City, Iowa	58,568	1	2							
Sioux Falls, S. Dak	16,887	11	1							
Somerville, Mass	88,618	33	9		1		2		3	2
South Bend, Ind	70,967	30			5					2
Southbridge, Mass	14,465	4								
Spartanburg, S. C	21,985	3			1					

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Dec. 28, 1918—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Spokane, Wash	157,656	.....	6	.....	1	.....	.....	.....	5	.....
Springfield, Ill	62,623	27	.....	.....	.....	.....	1	.....	.....	2
Springfield, Mass	108,048	76	8	1	.....	.....	3	.....	3	2
Springfield, Mo	41,109	13	.....	.....	.....	.....	.....	.....	.....	.....
Springfield, Ohio	52,296	31	1	.....	28	.....	.....	.....	1	4
Steubenville, Ohio	28,259	18	.....	.....	.....	.....	1	.....	.....	.....
Stockton, Cal	34,209	34	1	.....	.....	.....	.....	.....	.....	.....
Superior, Wis	47,167	13	1	.....	.....	.....	.....	.....	.....	2
Syracuse, N. Y	158,559	43	2	.....	.....	.....	7	.....	10	4
Tacoma, Wash	117,446	.....	.....	.....	1	.....	2	.....	.....	.....
Taunton, Mass	34,610	27	.....	.....	3	.....	.....	.....	2	4
Terre Haute, Ind	67,361	28	.....	.....	.....	.....	.....	.....	.....	2
Toledo, Ohio	202,010	114	5	.....	1	.....	6	.....	12	11
Topeka, Kans	49,338	11	1	.....	1	.....	.....	.....	.....	1
Trenton, N. J	113,974	47	7	.....	.....	.....	3	.....	3	5
Tuscaloosa, Ala	10,824	5	.....	.....	.....	.....	.....	.....	3	.....
Vallejo, Cal	13,803	10	.....	.....	.....	.....	.....	.....	.....	1
Vancouver, Wash	13,805	.....	.....	.....	.....	.....	1	.....	4	.....
Waco, Tex	34,015	14	1	.....	1	.....	.....	.....	1	1
Wakefield, Mass	12,947	2	.....	.....	.....	.....	.....	.....	.....	.....
Waltham, Mass	31,011	18	.....	.....	.....	.....	2	1	.....	1
Washington, D. C	349,282	261	9	4	4	.....	10	.....	16	9
Waterbury, Conn	89,201	.....	2	.....	.....	.....	3	.....	4	.....
Wausau, Wis	19,666	3	.....	.....	.....	.....	.....	.....	1	.....
Westfield, Mass	18,769	9	4	.....	.....	.....	.....	.....	1	2
West Hoboken, N. J	44,386	8	.....	.....	.....	.....	.....	.....	.....	.....
West New York, N. J	19,613	7	3	.....	.....	.....	2	.....	.....	.....
West Orange, N. J	13,964	3	.....	.....	.....	.....	1	.....	1	.....
West Warwick, R. I	15,782	.....	2	.....	.....	.....	.....	.....	.....	.....
Wheeling, W. Va	43,057	19	.....	.....	.....	.....	.....	.....	.....	1
Wilmington, Del	95,369	38	2	.....	.....	.....	1	.....	2	2
Wilmington, N. C	30,400	14	.....	.....	.....	.....	.....	.....	.....	2
Winchester, Mass	10,812	6	.....	.....	.....	.....	.....	.....	.....	.....
Winona, Minn	[1]18,583	11	.....	.....	.....	.....	.....	.....	.....	1
Winston-Salem, N. C	33,136	20	.....	.....	.....	.....	1	.....	7	4
Winthrop, Mass	13,105	1	.....	.....	.....	.....	.....	.....	.....	.....
Woburn, Mass	16,076	4	.....	.....	.....	.....	.....	.....	.....	1
Worcester, Mass	196,106	92	4	.....	16	.....	4	.....	3	10
Yonkers, N. Y	103,066	34	1	.....	.....	.....	2	.....	.....	3
Zanesville, Ohio	31,320	14	.....	.....	.....	.....	.....	.....	1	2

[1] Population Apr. 15, 1910.

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FOREIGN.

INFLUENZA ON VESSEL.

Steamship "Navua"—Papeete, Tahiti, Society Islands.

An epidemic outbreak of influenza has been reported at Papeete, Tahiti, following the arrival, November 16, 1918, of the steamship *Navua*, from San Francisco.

CHINA.

Plague-Infected Rat—Hongkong.

During the period from October 27 to November 2, 1918, out of 5,493 rats examined at Hongkong, 1 rat was found plague infected.

GREECE.

Further Relative to Influenza—Saloniki.[1]

During the period from September 30 to November 30, 1918, 590 fatal cases of influenza were reported at Saloniki, Greece.

Typhus Fever—Janina.

Typhus fever was reported present at Janina, Greece, December 18, 1918.

NEW ZEALAND.

Epidemic Influenza.[2]

Epidemic influenza was reported in New Zealand about the middle of October. The disease was severe in Auckland and became generally diffused throughout the Dominion.

PORTO RICO.

Influenza.

On December 16, 1918, influenza was reported to be widely prevalent in Porto Rico. On December 24 influenza was stated to be still prevalent in a number of rural districts. San Juan and other towns were reported to be practically free from the disease.

SALVADOR.

Yellow Fever—San Salvador.

A case of yellow fever was reported in San Salvador January 9, 1919.

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[1] Public Health Reports, Oct. 25, 1918, p. 1349. [2] Public Health Reports, Dec. 27, 1918, p. 2053.

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SWITZERLAND.

Influenza.

According to information dated November 7, 1918, 250,000 cases of influenza with 5,000 fatalities from the disease were reported in Switzerland from June 30, to October 31, 1918.

TAHITI.

Further Relative to Influenza—Papeete.[1]

An outbreak of epidemic influenza has been reported at Papeete, Tahiti, Society Islands, following the arrival on November 16, 1918, of the steamship *Navua* from San Francisco. The disease is stated to have spread with great rapidity, 3,000 cases being reported in a population of about 4,500. The mortality has been estimated at from 500 to 600 deaths occurring from November 25 to December 10, 1918.

URUGUAY.

Influenza—Montevideo.

A widespread outbreak of influenza was reported at Montevideo, Uruguay, during the last two weeks in October and the first week in November, 1918. The disease is stated to have been mild in form. Many cases of influenza have been reported in the interior of the country.

VIRGIN ISLANDS.

Quarantine Restrictions Against Porto Rico.

According to information dated December 16, 1918, passengers and crews of vessels arriving from Porto Rico have been refused permission to land at ports in the Virgin Islands.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Jan. 17, 1919.[2]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Calcutta	Sept. 29-Nov. 2		19	
Indo-China:				
Cochin-China—				
Saigon	Nov. 4-10	3	3	

PLAGUE.

Ecuador:				
Guayaquil	Nov. 1-30	5	3	
Egypt				Jan. 1-Nov. 21, 1918: Cases, 357; deaths, 152.
India				Oct. 20-26, 1918: Cases, 2,510; deaths, 1,858.

[1] Public Health Reports, Dec. 13, 1918, p. 2245.
[2] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Jan. 17, 1919—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada:				
Nova Scotia—				
Halifax	Dec. 22-28	6		
Canal Zone:				
Colon	Dec. 15-21	1		
China:				
Canton	Nov. 17-23			Present.
India:				
Calcutta	Sept. 29-Nov. 2		5	
Japan:				
Kobe	Dec. 1-7	14	2	
Newfoundland:				
St. Johns	Dec. 21-27	3		
Outports—				
Bay Roberts	do	1		
Spain:				
Valencia	Nov. 10-16	6	2	

TYPHUS FEVER.

Siberia:				
Vladivostok	Sept. 1-Nov. 30	16		

YELLOW FEVER.

Ecuador:				
Babahoyo	Nov. 1-30	1		
Guayaquil	do	77	43	
Punta de Piedra	do	1		

Reports Received from Dec. 28, 1918, to Jan. 10, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Aug. 18-Oct. 5	25	11	
Madras	Oct. 5-26	36	18	
Rangoon	Oct. 5-12	1	1	
Indo-China:				
Anam	Aug. 1-31	5	5	
Cambodia	do	98	71	
Cochin-China	do	110	89	
Saigon	Oct. 7-Nov. 5	15	9	
Tonkin	Aug. 1-31	1		
Java:				
East Java				Oct. 7-21, 1918: Cases, 169; deaths, 94.
Surabaya	Oct. 7-21	7	4	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 1,389; deaths, 867.
Samarang	Sept. 25-Oct. 16	120	111	
West Java				Oct. 2-23, 1918: Cases, 199; deaths, 112.
Batavia	Oct. 2-23	140	84	
Mesopotamia:				
Bagdad	Oct. 11-18	1		
Philippine Islands:				
Manila	Nov. 3-9	28	16	
Provinces				Nov. 2-9, 1918: Cases, 441; deaths, 417.
Batangas	Nov. 2-9	156	141	
Bohol	do	29	17	
Bulacan	Oct. 27-Nov. 2	5	6	
Cavite	do	23	23	
Iloilo	do	9	5	

[1] From medical officers of the Public Health Service, American consuls, and other sources. For reports received from June 29 to Dec. 27, 1918, see Public Health Reports for Dec. 27, 1918. The tables of epidemic disease are terminated semiannually and new tables begun.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Jan. 10, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Continued.				
Provinces—Continued.				
Laguna	Oct. 27-Nov. 2	2	2	
Misamis	do	6	5	
Oriental Negros	Nov. 2-9	20	8	
Pangasinan	do	236	192	
Rizal	Oct. 27-Nov. 2	3	1	
Tarlac	Nov. 2-9	7	4	
Union	do	7	5	
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17-Aug. 21	2,943	1,455	In civil hospitals. In military hospitals, Jul 5-Aug. 21, 1918: Cases, 884; deaths, 783.

PLAGUE.

China:				
Amoy				Present.
Hongkong	Oct. 26-Nov. 2	1	1	
Do	Nov. 9-16	1	1	
Nanking	Nov. 2-9			Always prevalent.
Ecuador:				
Guayaquil	Nov. 1-15	3	3	
India				Sept. 23-Oct. 19, 1918: Cases, 9,905; deaths, 7,756.
Bombay	Aug. 18-Oct. 19	32	21	
Karachi	Oct. 19-26	16	16	
Madras Presidency	Oct. 13-26	200	135	
Rangoon	Oct. 5-12	22	22	
Indo-China:				
Anam	Aug. 1-31	15	10	
Cambodia	do		23	
Cochin-China	do	14	11	
Saigon	Oct. 7-Nov. 3	3	1	
Java:				
East Java				Oct. 7-21, 1918: Cases, 17; deaths, 17.
Surabaya	Oct. 7-21	3	3	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 14, deaths, 14.
Samarang	Sept. 25-Oct. 16	6	6	
Siam:				
Bangkok	Sept. 21-28	4	3	
Do	Oct. 5-12	2	2	

SMALLPOX.

Algeria:				
Algiers	Oct. 1-31	1		
Canada:				
New Brunswick—				
St. John	Nov. 8-14	3		
Nova Scotia—				
Halifax	Dec. 7-14	4		
Quebec—				
Montreal	Nov. 24-Dec. 21	2		
Quebec	Dec. 15-21	1		
China:				
Amoy	Oct. 13-20			Present.
Do	Oct. 28-Nov. 4			Do.
Foochow				Always prevalent.
Denmark:				
Copenhagen	Nov. 9-23	5		
India:				
Bombay	Aug. 18-Oct. 19	11	3	
Karachi	Sept. 29-Oct. 5	1	1	
Madras	Oct. 5-26	12	5	
Indo-China:				
Anam	Aug. 1-31	29	8	
Cambodia	do	78	40	
Cochin-China	do	97	27	
Saigon	Oct. 7-20	13	3	
Tonkin	Aug. 1-31	5		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Jan. 10, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Kobe	Oct. 26–Nov. 30	55	12	
Java:				
East Java				Oct. 7–21, 1918; Cases, 6.
Surabaya	Oct. 7–21	3		
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 55.
West Java				Oct. 2–23, 1918: Cases, 313; deaths, 101.
Batavia	Oct. 2–23	73	58	
Mesopotamia:				
Bagdad	Oct. 11–18	11		
Mexico:				
Ciudad Juarez	Nov. 24–30	1		
Newfoundland:				
St. Johns	Dec. 6–20	4		
Outports—				
Baine Harbor	Dec. 14–20	2		
Bryants Cove	Dec. 7–13	3		
Burin	do	4		
Coleys Point	Dec. 14–20	1		
Musgrave Harbor	Dec. 7–13	4		
Paradise	do	60		Placentia Bay.
Philippine Islands:				
Manila	Nov. 2–9	2	2	
Portugal:				
Lisbon	Nov. 16–23	255		
Spain:				
Cadiz	Oct. 1–31		3	
Madrid	Sept. 1–Oct. 31		153	
Straits Settlements:				
Penang	Oct. 6–12	1		
Union of South Africa:				
Cape of Good Hope State—				
Cape Town	Aug. 1–30	1		

TYPHUS FEVER.

Brazil:				
Ceara	Sept. 14–21	1		
Colombia:				
Barranquilla	Nov. 8–Dec. 7		2	
Egypt:				
Alexandria	Oct. 14–Nov. 25	63	39	
Greece:				
Saloniki	Sept. 29–Oct. 19		19	
Japan:				
Nagasaki	Nov. 10–24	2	1	
Java:				
East Java				Oct. 7–21, 1918: Cases, 5.
Surabaya	Oct. 7–21	4		
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 8.
West Java				Oct. 2–23: Cases, 31; deaths, 6.
Batavia	Oct. 2–23	15	4	
Union of South Africa:				
Port Elizabeth	Sept. 14–28			Present among natives in several interior towns.

YELLOW FEVER.

Ecuador:				
Duran	Nov. 1–15	1	1	
Guayaquil	do	38	21	
Milagro	do	1		
Salvador:				
San Salvador	Jan. 9	1		

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the preceding week. (See p. 137.)

CODE OF LIGHTING FOR FACTORIES, MILLS, AND OTHER WORK PLACES.

The following is a report of the divisional committee on lighting, section on sanitation, committee on welfare work of the committee on labor, advisory commission, Council of National Defense.

This report is published by permission of Mr. Samuel Gompers, chairman of the committee on labor.

The chairman of the divisional committee states that the rules, as set forth herein, have been officially approved by the Illuminating Engineering Society and have been tried out for several years under working conditions in factories, mills, and other work places.

These rules constitute the basis of the Pennsylvania factory lighting code, which became effective in the labor laws of that State June 1, 1916; also the basis of the New Jersey lighting code, which went into effect in that State on August 1, 1916.

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The appendix, containing the supplementary notes, was abstracted from the factory lighting code of the Illuminating Engineering Society.

The committee recommends that steps be taken at once to put the code into effect in every State in the country. For purposes of legislative enactment the rules alone may suffice.

The divisional committee on lighting was composed of the following members:

L. B. Marks, chairman, consulting engineer, 108 Park Avenue, New York City.

C. E. Clewell, assistant professor, electrical engineering, University of Pennsylvania, Philadelphia, Pa.

A. S. McAllister, consulting engineer, 261 West Twenty-third Street, New York City.

Preston S. Millar, general manager, electrical testing laboratories, East End Avenue and Eightieth Street, New York City.

Fred J. Miller, works manager, Remington Typewriter Co., 374 Broadway, New York City.

William J. Serrill, engineer of distribution, United Gas Improvement Co., Philadelphia, Pa.

G. H. Stickney, illuminating engineer, Edison Lamp Works, Harrison, N. J.

Part 1.—Prefatory Note.

When adequate and satisfactory illumination is substituted for the all too prevalent poor illumination in factories, mills, and other work places the results obtained are mutually beneficial to the employees, the employers, and the country as a whole. Under proper illumination conditions the health, contentedness, safety, and skill of the employees are maintained at a high standard, the output is increased in quantity and improved in quality, while there is a proportional reduction in the cost of each unit of finished product when it reaches the public.

While it is desirable to have adequate light over the working areas it is absolutely essential for the proper results to eliminate or minimize the light which otherwise would pass directly from the lamps to the eyes of the workers; that is, one must avoid *glare*, which is not only fatiguing to the eye but also conducive to the incorrect estimation of sizes and locations of objects in the field of view.

Glare effects may be caused not only by the light reaching the eye directly from the sources having a brightness greatly in excess of that of the objects viewed, but they may be produced by excessive reflections from the objects within view. In factory lighting each lamp should be so located that the eye does not see it in the ordinary course of work, and so shaded or covered that brilliant reflections are avoided. The desired result can be obtained by putting over the lamp an open shade which screens it and reflects downward much of the light which would otherwise be of either no value or actually

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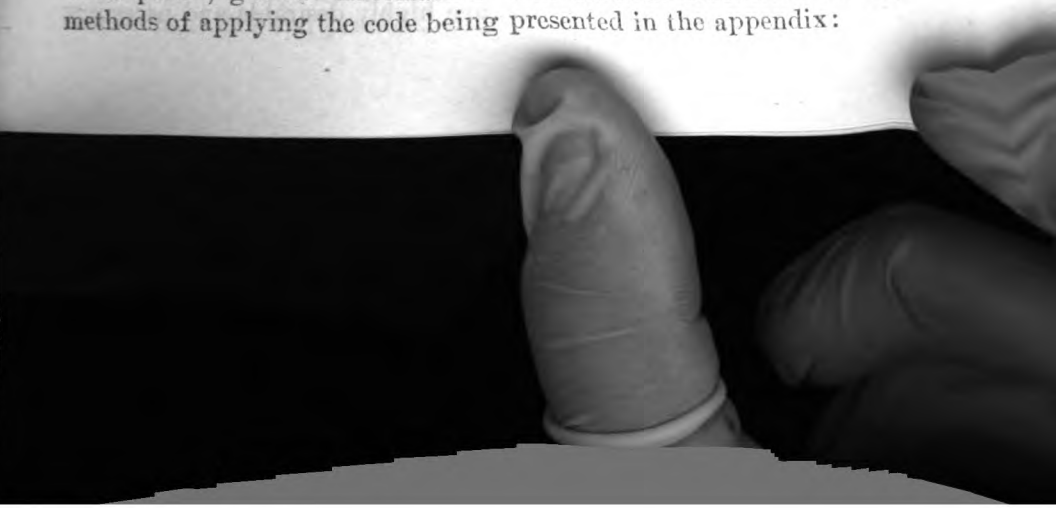
in hand.

Advantages of good light.—While the necessity of good light is so evident that a list of its effects may seem commonplace, these same effects are of the greatest importance in their relation to factory and mill management. The effects of good light, both natural and artificial, and of bright and cheerful interior surroundings, include the following:

1. Reduction of accidents.
2. Greater accuracy in workmanship.
3. Decreased spoilage of product.
4. Increased production for the same labor cost.
5. Less eye strain.
6. Better working and living conditions.
7. Greater contentment of the workmen.
8. Better order, cleanliness, and neatness in the plant.
9. Easier supervision of the men.

In this list it will be noted that items 5, 6, 7, 8, and 9 all have a bearing on accident prevention.

The following code gives in the briefest possible form the essentials of proper and adequate lighting for factories, mills, and other work places, general information with detailed discussion of the methods of applying the code being presented in the appendix:



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Part 2. Rules.

RULE 1. *General requirement.*—Working or traversed spaces in buildings or grounds shall be supplied during the time of use with artificial light in accordance with the following rules when natural light is less than the intensities specified in rule 2.

RULE 2. *Intensity required.*—The desirable illumination to be provided and the minimum to be maintained are given in the following table:

	Foot-candles[1] at the work.	
	Ordinary practice.	Minimum.
(a) Roadways and yard thoroughfares	0.05—0.25	0.02
(b) Storage spaces	.50—1.00	.25
(c) Stairways, passageways, aisles	.75—2.00	.25
(d) Rough manufacturing, such as rough machining, rough assembling, rough bench work	2.00—4.00	1.25
(e) Rough manufacturing, involving closer discrimination of detail	3.00—6.00	2.00
(f) Fine manufacturing, such as fine lathe work, pattern and tool making, light-colored textiles	4.00—8.00	3.00
(g) Special cases of fine work, such as watchmaking, engraving, drafting, dark-colored textiles	10.00—15.00	5.00
(h) Office work, such as accounting, typewriting, etc	4.00—8.00	3.00

[1] The foot-candle, the common unit of illumination, is the lighting effect produced upon an object by a standard candle at a distance of 1 foot; at 2 feet the effect would be not one-half foot-candle, but one-fourth foot-candle, etc. A lamp which would give off 16 candlepower uniformly in all directions would produce a uniform illumination of 1 foot-candle at a distance of 4 feet in any direction.

NOTE.—Measurements of illumination are to be made at the work with a properly standardized portable photometer.

RULE 3. *Shading of lamps.*—Lamps shall be suitably shaded to minimize glare.

NOTE.—Glare, either from lamps or from unduly bright reflecting surfaces, produces eye strain and increases accident hazard.

RULE 4. *Distribution of light on work.*—Lamps shall be so installed in regard to height, spacing, reflectors, or other accessories as to secure a good distribution of light on the work, avoiding objectionable shadows and sharp contrasts of intensity.

RULE 5. *Emergency lighting.*—Emergency lamps shall be provided in all work-space aisles, stairways, passageways, and exits, to provide for reliable operation when, through accident or other cause, the regular lighting is extinguished. Such lamps shall be in operation concurrently with the regular lighting and independent thereof.

RULE 6. *Switching and controlling apparatus.*—Switching or controlling apparatus shall be so placed that at least pilot or night lights may be turned on at the main points of entrance.

Part 3.—Appendix—General Information and Suggestions.

SECTION 1. DAYLIGHT:

Adequate daylight facilities through large window areas, together with light cheerful surroundings, are highly desirable and necessary

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features in every work place, and they should be supplied through the necessary channels, not only from the humane standpoint but also from the point of view of maximum plant efficiency.

Importance of daylight.—The unusual attention to gas and electric lighting in factories, mills, and other work places during the past few years, the perfection of various lamps and auxiliaries by means of which an improved quality and quantity of lighting effects are obtained, and the care which has been devoted to increasing the efficiency in various industrial operations—all go to emphasize the many advantages and economies that result from suitable and adequate window space as a means for daylight in the proper quantities and in the right directions during those portions of the day when it is available.

Three considerations.—Three important considerations of any lighting method are *sufficiency*, *continuity*, and *diffusion*. With respect to the daylight illumination of interiors, *sufficiency* demands adequate window area; *continuity* requires (*a*) large enough window area for use on reasonably dark days, (*b*) means for reducing the illumination when excessive, due to direct sunshine, and (*c*) supplementary lighting equipment for use on particularly dark days, and especially toward the close of winter days; *diffusion* demands interior decorations that are as light in color as practicable for ceilings and upper portions of walls, and of a dull or mat finish, in order that the light which enters the windows or that which is produced by lamps may not be absorbed and lost on the first object that it strikes, but that it may be returned by reflection, and thus be used over and over again. Diffusion also requires that the various sources of light, whether windows, skylights, or lamps, be well distributed about the space to be lighted. Light-colored surroundings, as here suggested, result in marked economy, but their main object is perhaps not so much economy as to obtain a result that will be satisfactory to the human eye.

Requirements.—The following requirements may now be listed for natural lighting:

1. The light should be adequate for each employee.

2. The windows should be so spaced and located that daylight conditions are fairly uniform over the working area.

3. The intensities of daylight should be such that artificial light will be required only during those portions of the day when it would naturally be considered necessary.

4. The windows should provide a quality of daylight which will avoid a glare due to the sun's rays and light from the sky shining directly into the eye, or where this does not prove to be the case at all parts of the day, window shades or other means should be available to make this end possible.

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5. Ceilings and upper portions of walls should be maintained a light color to increase the effectiveness of the lighting facilities from window areas. The lower portions of walls should be somewhat darker in tone to render the lighting restful for the eye. Factory green or other medium colors may be used to good effect.

Classification.—Means for natural lighting may be classed under three broad divisions, as follows:

(*a*) That case in which the windows are located on the sides of the building or in the framework of saw-tooth construction, where diffused light from the sky reaches the work during a large portion of the day.

(*b*) That case in which windows are located overhead on a horizontal or nearly horizontal plane in the form of skylights, thus furnishing direct light from the sky during a large portion of the day.

(*c*) That case in which prismatic glass takes up the direct light from the sky and redirects it into the working space.

Method (*a*) is, of course, the most common of the three, and it may be noted that the saw-tooth or other roof-lighting constructions have become very popular and result in an excellent quality and quantity of light for given window areas provided the size and location of windows are in accord with modern practice.

Increasing the value of floor space.—Adequate and well-distributed natural light means that certain portions of the floor space which ordinarily would not be available for work are converted into valuable manufacturing space. In a general way, therefore, the average factory, mill, or other work place, if properly designed, should possess natural lighting facilities which produce the best practicable distribution of daylight illumination.

Wide aisles.—With low ceilings and very wide aisles, workmen located at the central portion of the building must sometimes depend for their natural light on windows located at a considerable distance away from their working position. In these cases it may be impossible, in general, to depend altogether on daylight over an entire floor space, even at those times of the day when daylight conditions would be entirely adequate under other circumstances. This statement applies to side windows rather than to skylights or to saw-tooth construction.

Varying conditions.—In a case of this kind employees located next to the windows are furnished with suitable daylight in the early morning and toward the latter part of the afternoon, the upper portions of the windows being particularly serviceable in lighting areas at some distance away from the windows. A southern exposure, however, results in such excessive light from the sky during the middle of the day that heavy shades are nearly always pulled down so as to cover the entire window area. This plan makes it necessary

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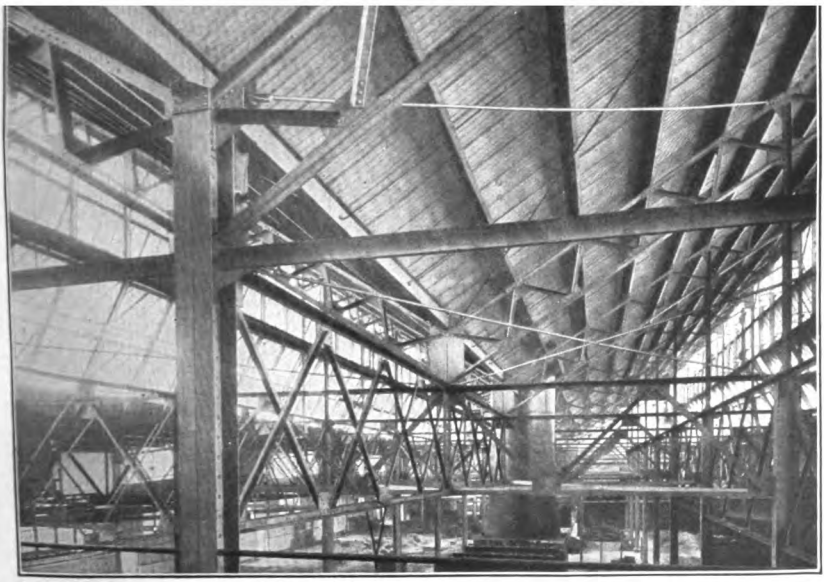

Fig. 2.—Light-colored walls and ceilings are important in economizing and diffusing both natural and artificial light. In this foundry the daylight reflected from the sloping roof contributes to the illumination on the work.

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Fig. 3.—Even in wide buildings of one story, excellent illumination can be secured throughout by a proper arrangement of windows and skylights. In this foundry side-wall windows are supplemented by windows nearly vertical in the roof. Windows should be so arranged and glazed as to avoid objectionable glare.

Fig. 4.—This machine shop is unsafe and inefficient because of inadequate artificial light, poor distribution, and excessive glare. Note the brilliant light shining on the face of the workman at the right of the illustration.

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Fig. 5.—In this punch press room the overhead lamps are located so that important parts of the work are in shadow. The unshaded local lamps glare in the workman's eyes. The dark ceiling makes the room appear gloomy. If the large lamps were suspended in front of the machines instead of behind, few if any local lamps would be needed. These should be shaded.

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to use artificial light throughout the larger part of the office during the brightest portion of the day and reduces the daylight at those points where it would supposedly be the best—namely, near the windows. Here the location of the windows is a large factor in the excellence of the daylight conditions but the manipulation of the shades is perhaps even more important. To avoid such a difficulty, adjustable translucent upper window shades with adjustable opaque lower shades might be employed.

Upper portions of windows.—It should be further noted in this illustration that the upper portions of the windows give a reduced illumination in proportion to their areas, to the floor space near them. In rooms of moderate size, therefore, the windows should be placed as near the ceiling as practicable. When the sun shines through windows so located, the direct light must be reduced or diffused. This may be accomplished by the use of ribbed glass in ordinary factory and mill buildings, and in offices by the use of translucent sunshades or awnings.

Tempering the light.—The light due to the sunshine on such shades and awnings will be as bright as ordinary skylight if the shade is well chosen, and the ribbed glass will be still brighter. If the windows are large, the illumination is likely to be too great near the windows, as previously pointed out, and it must be reduced. This should not be done, however, by pulling down an opaque shade over the top of the windows, because the top portion of the window is the part that is particularly needed to give light to the interior of the room. The better scheme is to employ an opaque shade *which should be raised from the bottom of the window.* This will reduce the illumination near the window without affecting it over the interior of the room to any marked degree.

Window glasses.—Both translucent and clear glass are employed for factory and mill windows. There is a slight reduction in the transmitted light through ordinary translucent wire glass, but it is often required by insurance regulations for a deduction in the fire risk where a given building is located in close proximity to other buildings. Wire glass is also used quite generally with steel window frames, here being an added protection from the standpoint of fire risk. Wire glass may be obtained in clear form, but its expense in contrast to the translucent form is such as ordinarily to prohibit its use for industrial purposes.

Wire glass.—Wire glass, also known as ribbed glass, should be used and is advocated for practically all factory and mill windows where prisms are not required. Wires of rather open mesh cause so little reduction in light as to warrant no mention of this feature. Special care should be taken to get such glass as is smooth both on the flat

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side and on the ribbed side to facilitate cleaning. Wire or ribbed glass gives better diffusion than plain glass.

Prism glass.—Where the sky outside of the windows is obstructed by buildings, prism glass is recommended if the room is deep. Different kinds of prisms can not be used to advantage interchangeably. The amount of prism glass required in any case depends much upon the surroundings, and to obtain excellent results of which such glass is capable it must be used intelligently.

Skylights.—Skylights are sometimes installed in long, narrow, continuous strips in a sloping roof. The ribs of the ribbed glass are generally so arranged that it is convenient to make them at right

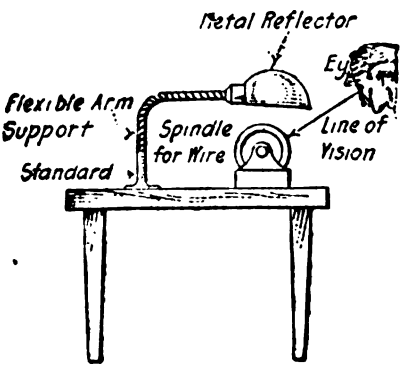

FIG. 6. While the reflector as shown shades the eyes of the workman and gives a good intensity on the work, the lighting effect may be poor unless other illumination is provided for the surroundings. Too great a contrast between the light on the work and on its surroundings is a common cause of glare. Compare with Fig. 7.

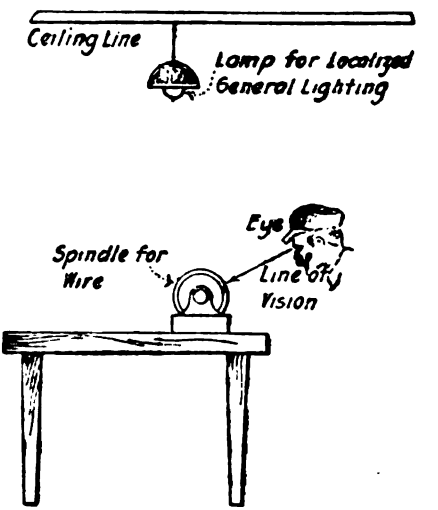

FIG. 7.—Larger lamps hung higher usually provide good light on the work and sufficient surrounding illumination to avoid glare. For some classes of work, such as lathe work, lamps should be located further to the right so as to illuminate the front of the machine.

angles to the length of the strips. The result is that the sunshine is diffused by the ribs over a narrow area parallel to the strip of skylight, thus lighting one part of the room much more brilliantly than the remainder. If the ribs are installed to run parallel to the strips, they will give a much more general distribution of the sunlight. In the foregoing, the word *strip* refers to the long belt of skylight and not to the individual sheet of glass. Ribbed glass in vertical windows should generally be placed with the ribs horizontal. They thus roughly fulfill some of the functions of prisms.

Dirt accumulations.—While translucent wire or ribbed glass reduces the amount of light transmitted through the windows, the roughness of the outside surface of such glass often causes accumu-

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lations of dust and dirt, which are more to blame for the reduction of transmitted light in some cases than the translucent nature of the glass itself. Remedies of this difficulty are to secure smooth glass and to resort to frequent cleaning.

Wire glass as a safeguard.—Wire glass for skylights is, of course, a practical necessity as a safeguard against accidents due to accidental breakage of the glass or due to objects falling on top of the glass.

Sunshine not desirable.—In all the work of providing natural light it should be kept in mind that direct sunshine in itself, from the illumination standpoint but irrespective of sanitary conditions is not wanted. The idea that sunshine is the important item is a common but an erroneous impression. For example, in saw-tooth construction the windows do not face the south to get all the sunshine possible, but they face the north to exclude the sunshine. Ordinary windows, on the other hand, face all directions because not enough light can be distributed to interiors from north windows alone. Windows on the other than north fronts admit sunshine to be sure, and this makes sunshades and awnings necessary to exclude the excessive brightness.

SECTION 2. VALUE OF ADEQUATE ILLUMINATION:

Factory and mill owners are concerned in the matter of securing the largest output for a given manufacturing expense. An improved machine tool capable of increasing the product for given labor costs is most attractive, provided its first cost is within returnable limits out of the larger profits. Improved small tools, better methods of handling material, adequate crane service, fire protection, good shop floors, accurate and efficient time-keeping methods, and similar items, vitally concern the shop manager; money is expended to realize excellence in these features, because they afford increased economies and protection, thus resulting in a higher efficiency of the plant.

Energy consumption a minor item.—Many arguments leading to the sale of gas and electric lamps for use in factory and mill buildings are based on reducing the lamp operation cost by substituting a new for an older system. Arguments of this kind are of value, however, only when such a reduction in operation cost can be effected without sacrifice in the adequacy of the illumination. It would be a poor policy, in the extreme, to argue a saving in energy consumption by the substitution of one type of lamp for another on a basis of equal candlepower in both old and new systems.

Effect of good light on production.—Arguments of a convincing nature, which insure to the factory or mill manager an increased output through improved illumination service, are of importance and even greater at times than reductions in the cost of illumination for the same quantities of light. In view of the fact that resulting ad-

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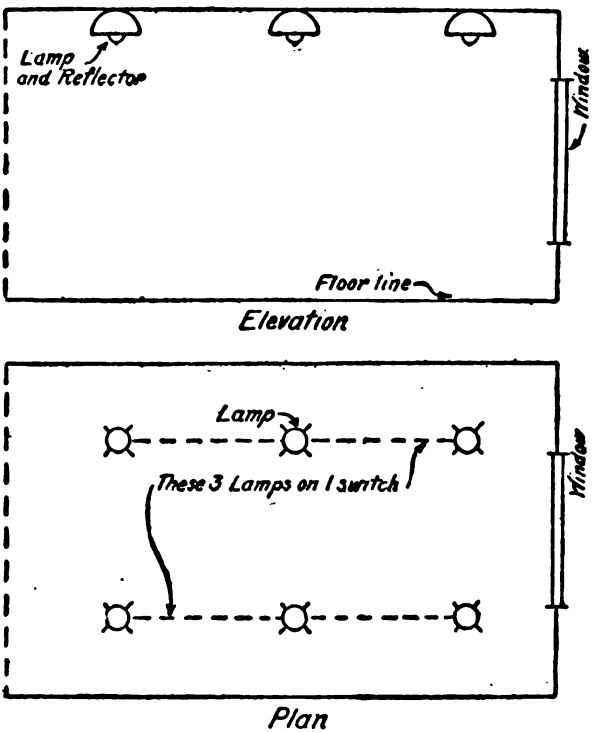
vantages of superior illumination on increased output are apt greatly to exceed economies in operation cost as regards the lighting system, it is a distinct advantage to direct and hold the attention on the former rather than on the latter. This statement will be more apparent when interpreted into definite items as follows:

Interpreting the advantages of good light.—While the major consideration in the eyes of the factory or mill owner is undoubtedly and quite naturally the money value of good light in the larger return of both quantity and quality of work which may result from



[illegible] This illustrates an uneconomical arrangement of control, since lamps near the windows can not be turned off independently of those more remote. Compare with Fig. 9.

the installation of a superior as compared with an inferior lighting system, it should be noted that it is very difficult to interpret into dollars and cents the value of good light made possible by such returns. This difficulty is due to the necessity of keeping all conditions in a factory or mill section absolutely constant while varying the amount of illumination from poor to good conditions in an effort to determine the output and its dependency on the lighting facilities. *As accurate data become available*, giving the increases in production for certain specific improvements in artificial lighting, it will doubtless prove helpful to a proper interpretation of adequate light and its worth to any plant.

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Practical example.—Continuing from the manufacturer's point of view, it may be said that certain assumptions as to energy cost, cleaning, interest, and depreciation show that the annual operation and maintenance cost for the illumination of a typical shop bay of 640 square feet area may be taken at $50. If five workmen are employed in such a bay at an average wage of, say, 25 cents per hour, the gross wages of the men in such a bay, plus the cost of superintendence and indirect shop expense, may equal from $5,000 to $7,000 per annum. In a case of this kind, therefore, the lighting

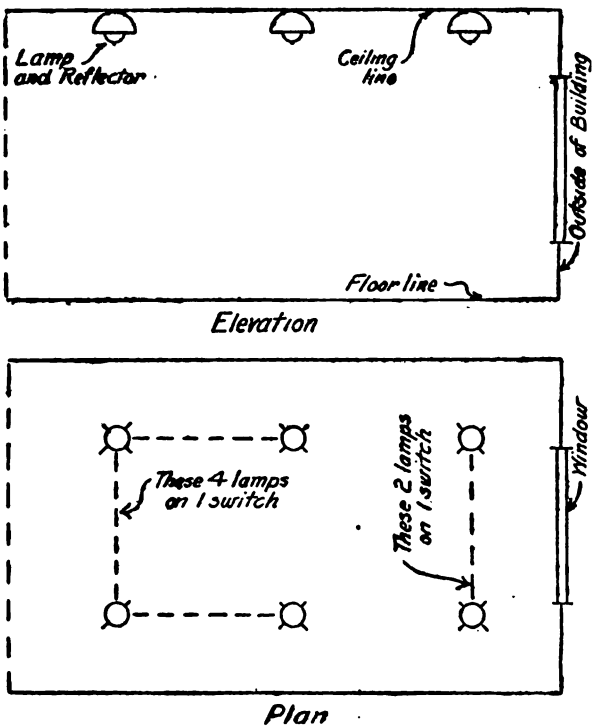

FIG. 9.—This scheme of control in groups parallel to the windows is an improvement on that shown in Fig. 8, permitting lamps in the dark parts of the room to be turned on and those near the windows to be turned off during the hours of fading daylight, when the latter are unnecessary.

will cost from seven-tenths to 1 per cent of the wages, or the equivalent of less than four to six minutes per day. We may roughly say that a poor lighting system will cost at least one-half this amount (sometimes even more through the use of inefficient lamps and a poor arrangement of lamps), or the equivalent of, say, two to three minutes per day. Nearly all factories and mills have at least some artificial light; hence, in general, if good light enables a man to do better or more work to the extent of from two to three minutes per day the installation of good lighting will easily pay for the difference between good and bad light through the time saved for the workmen.

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Actual losses.— Superintendents have stated in actual instances that due to poor light their workmen have lost much time, sometimes as much as from one to two hours per day on certain days. If good light will add an average of, say, one-half hour per day to the output, these 30 additional effective minutes represent an increase in output of 5 per cent, brought about through an expenditure equal to one-half of 1 per cent of the wages for improved lighting, or a saving equal to ten times the expense.

SECTION 3. OLD AND NEW LAMPS.

The inadequate means available for illumination by artificial methods in the past have contributed to the slowness of an appreciation of the features of artificial light which influence the working

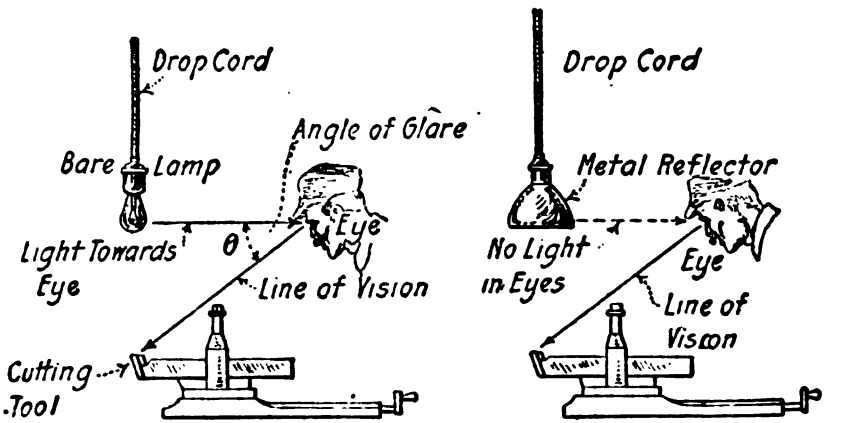

FIG. 10 These companion diagrams illustrate the importance of a reflector for local lighting. The reflector as shown at the right shades the eyes of the workman and increases the light on the work.

efficiency of the eye. Open-flame gas burners, carbon incandescent and arc lamps, practically the only illuminants available 10 years or so ago, play but a small part in the present approved methods of factory and mill lighting.

New lamps.—The large variety of comparatively new lamps available for factory and mill lighting includes the mercury vapor, metallized filament, tungsten, gas-filled tungsten, metallic flame or magnetite arc, the flame carbon arc, the quartz mercury vapor, and various types of gas arc lamps. Remarkable improvements have thus been made in both the electric and gas lighting fields, the same general rules of applying the lamps covering both of these fields. Possibilities in factory and mill lighting are now attainable which before the introduction of these new lamps were either unthought of or impossible. Consideration of the eye as a delicate organ, together with the new ideas of the items which affect its comfort and effi-

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arc lamp in the latter case.

Low ceilings.—For low ceilings, up to 18 feet, the use either of carbon filament, open-flame gas burner, or arc lamps resulted usually in anything but uniform light over the working plane and often produced merely a low general light, which was practically useless for the individual machine. In such instances individual lamps had to be placed over and close to the machines. With this arrangement relatively small areas are lighted by each lamp, and the metal shades usually employed serve only to accentuate the "spot lighting" effect. Such a form of illumination for factory and mill work is unsatisfactory and inefficient, but, as stated, was in the past in many cases the only available scheme. *The absence of lamps of the proper size is no longer an excuse for the existence of such conditions in industrial plants.*

SECTION 5. OVERHEAD AND SPECIFIC METHODS OF ARTIFICIAL LIGHTING.

Factory and mill lighting may be classified under two general divisions—first, distributed illumination furnished from lamps mounted overhead; and, second, specific illumination furnished by individual lamps located close to the work. For practical purposes this classification is sufficient. In numerous cases a combination of these two methods becomes necessary.

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Mounting the lamps high.—Where the lamps are high enough to be out of the line of ordinary vision, and are of a size and so spaced as to furnish illumination at any position of the floor where work may be carried on, the system is referred to as the *overhead method* of lighting. This method has many advantages. Its general adoption, which has been somewhat slow, has increased with the appearance of the many new types of lamps and with the growing appreciation of the value of good lighting.

Where a small amount of general or overhead lighting is coupled with specific lighting from individual lamps, a large part of the floor space in many shops is in relative darkness, and much dependence must be placed on the hand lamps close to the work. The small number of overhead lamps generally used in such cases, furnishes merely a small amount of additional illumination over the floor space which is not sufficient to be of much value. However, where sufficient intensity is provided by general illumination, this is often a very effective means of lighting a large work room.

Low ceilings.—Locations with low ceilings, until recently, have been lighted by the individual hand-lamp method, because the old carbon-filament lamps, being of low candlepower, could not well be used close to the ceiling, while the old type of arc lamp was often impracticable, due to its large physical size, as well as its relatively high candlepower. This statement is subject to some modification, because low candlepower units have sometimes been used in clusters for low ceilings as a compromise between a single small or a single large unit, this scheme being, however, usually insufficient and unsatisfactory in comparison with modern methods of lighting. In a particular manner, therefore, suitable illumination has been difficult with low ceilings.

New types of gas and electric lamps have a range of candlepower from very low to very high values, and the overhead system with the elimination of individual lamps is thus possible; in other words, a size of gas or electric lamp may now be selected from a large available list of sizes for nearly every factory or mill condition.

SECTION 6. LIGHTING CIRCUITS FOR ELECTRIC LAMPS AND SUPPLY MAINS FOR GAS LAMPS:

The question of lighting circuits is mentioned here with particular reference to factory and mill conditions, where motor loads are apt to be large in comparison to the energy consumption of electric lamps which are in service. In some cases, the proportion of motor load to lighting load is in the ratio of 10 to 1, in others 7 to 1, and so on, and the varying demands on the circuits by motors may greatly affect the lamps. Hence it is important to maintain strictly separate supply circuits for the lamps in order to avoid varying voltage which is apt to result if the motors are connected to the same circuits with the lamps.

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Control parallel to windows.—The lamps most distant from the windows will usually be required at times when the natural light near the windows is entirely adequate, thus making it an advantage to arrange the groups of lamps in circuits parallel to the windows. The advantage of this method is further apparent when it is considered that if the lamps are controlled in rows perpendicular to the windows, all lamps in a row will necessarily be on at one time, while a portion only may be required.

Practical case.—The foregoing statement may be developed into a definite proposition. Thus, to install a single switch may involve, say, $5 as its first cost. If 10 lamps are to be controlled from a single switch, these 10 lamps must obviously either all be turned off at a time or all turned on at a time. An additional switch at a cost of $5 will permit either half of these 10 lamps being turned off, if not required at certain times, when the remaining five are needed. This extra switch may or may not be an economy. Consider, for example, the case where these five lamps are of the 60-watt tungsten type, and that they are turned off by the extra switch on an average of one-half an hour per day while the others are needed, or *vice versa.* In a year's time the energy saved at 1 cent per kilowatt-hour will amount to perhaps 50 cents. At this rate it will require 10 years for the energy saved to pay for the first cost of the extra switch. This would not be considered a distinct economy. If, however, the energy cost

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be greater, and more nearly the average under actual conditions, or if the number of hours per day during which a portion only of the lamps will not be used be greater, then these values will be correspondingly modified.

Locating switches and controls.—In locating switches or controls in factory and mill aisles care should be exercised to arrange them systematically—that is, on columns situated on the same side of the aisle and on the same relative side of each column. This plan materially simplifies the finding of switches or controls by those responsible for turning on and off the lamps and is particularly important where a given floor space is illuminated by a large number of small or medium sized lamps distributed uniformly over the ceiling area, a feature which is usually accompanied by the use of a relatively large number of switches or controls.

SECTION 8. SYSTEMATIC PROCEDURE SHOULD BE FOLLOWED IN CHANGING A POOR LIGHTING SYSTEM OVER TO AN IMPROVED ARRANGEMENT:

When undertaking the change from an old to a new lighting system, the various forms of illumination which are adapted to factory and mill spaces should be studied and an investigation made of the various types of gas and electric lamps on the market which are available for the purpose.

Time should be allowed for a study of the given locations to be lighted; for preparing the plans of procedure in the installation of the gas or electric lamps and auxiliaries; and for customary delays in the receipt of the necessary supplies and accessories to the work in hand. Altogether, therefore, work of this kind requires considerable time for its completion.

Using the shop force.—In large factories or mills a wiring or gas-fitting force is sometimes a part of the maintenance division. The work of the wiremen or fitters is likely to be heaviest in the winter, due to the dark days. Where this condition exists there is all the more reason to apportion out new work so as to accomplish it during the months of least wiring and piping repair activity, and, further, at that time of the year when employees will be comparatively unaffected by the disturbances usually associated with a change from an old to a new lighting system through possible irregularities in the illumination service while the wiremen or fitters are at work.

Distribution of expense.—Another feature different from the foregoing viewpoint is in the distribution of the installation cost over a relatively long interval. If, for example, the system is desired for the approaching winter, the complete wiring or piping plans may be drawn up and blocked out into three, four or even more sections, thus spreading the expense over as many months.

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Fig. 11.—In this well-lighted machine shop note the even distribution of light and freedom from glare. The illumination is economically concentrated on the work. As it appears in the illustration, additional light on the ceiling would render the room more cheerful.

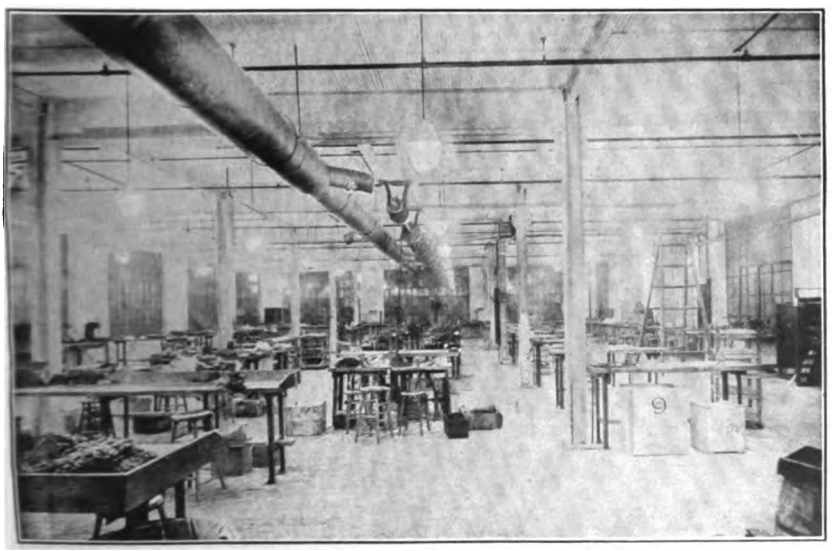

Fig. 12.—The light ceiling increases the cheerfulness of the factory in a remarkable manner. With white ceilings the excellent diffusion and even distribution obtainable with semi-indirect lighting amply justifies its slight additional cost, especially where fine detail must be seen.

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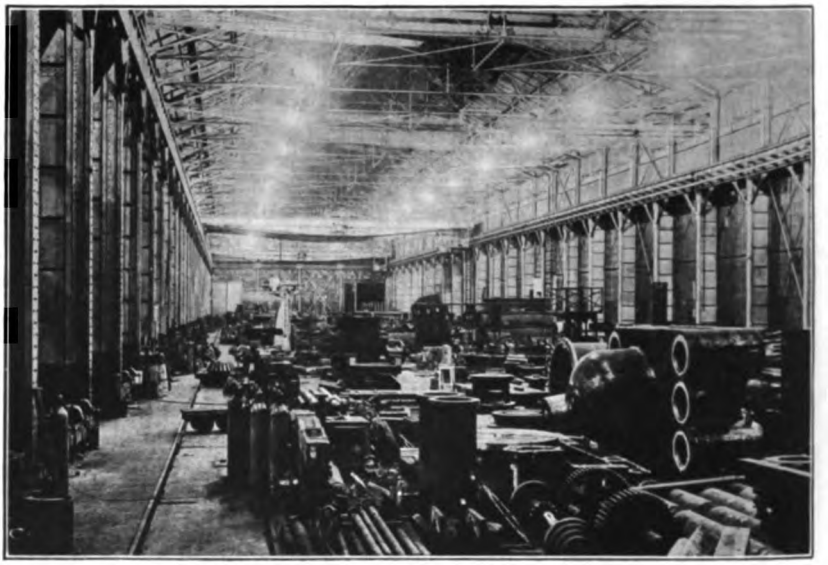

Fig. 13.—A good example of the illumination effect which can be secured by the overhead system of lighting. In this erecting shop the high mounting of the lighting units prevents brilliant light sources from causing objectionable glare. Note also the even light distribution and soft shadows.

Fig. 14.—A factory office illuminated by a general system of lighting, arranged to conceal brilliant light sources. Adequate light is provided without drop lamps at the desks. (See also Fig. 15.)

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Fig. 15.—In this small office with indirect lighting, the illumination is produced by reflection from the ceiling. Note the even distribution of light on the desk surface and the absence of glare.

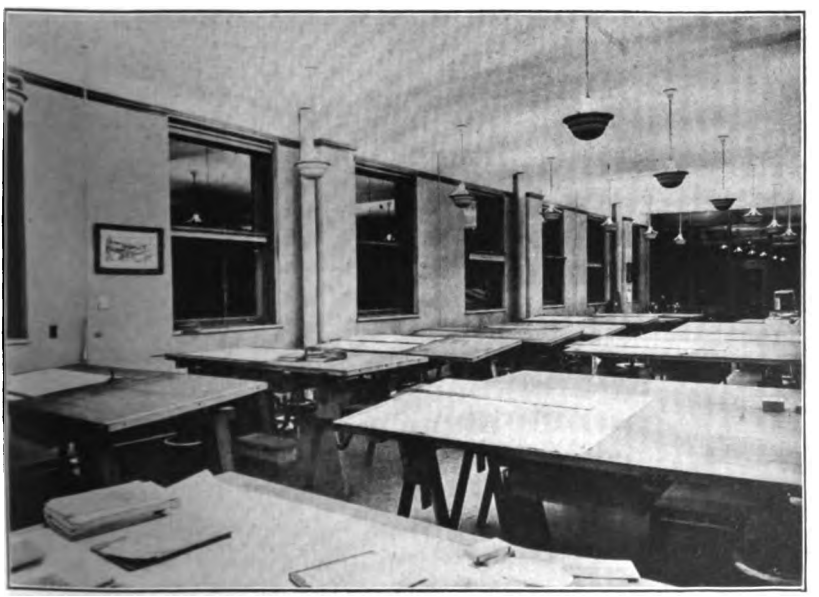

Fig. 16.—In this example of drafting room lighting, shadows are minimized by utilizing the white ceiling as the indirect source of light. The reflectors are so arranged as to conceal the lamps and spread the light evenly on the ceiling. Indirect methods of lighting are applicable only with white or light colored ceilings.

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Fig. 17.—Benches near and facing the walls may be illuminated effectively by lamps placed high above the bench, as shown here. Proper reflectors however, are important for the best results. Note that the location is such as to give good direction of light and avoid shadow cast by workman.

Fig. 18.—These machine tools are illuminated by a system of special fixtures for producing a well-diffused light with little or no glare. A supplementary shade conceals the lamp filament from view. Note the excellent distribution of illumination throughout this space.

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Yearly appropriation.—In some shops a given appropriation may be allotted each year for building equipment. From the standpoint of finance plans, it may thus be desirable to distribute outlays of this nature over the year, rather than to concentrate them at any one time. *An important consideration in this method of installing lamps, however, is to prepare as far as possible the complete plans in advance, at least as regards given factory or mill sections, so as to insure a uniform and symmetrical installation as a whole when the component parts are finished.*

SECTION 9. REFLECTORS AND THEIR EFFECT ON EFFICIENCY:

A reflector or shade is used in conjunction with a lamp for the purpose of reducing the glare otherwise caused by looking directly into the bare lamp, as well as for the purpose of redirecting the light most effectively to the work.

Reflectors and shades, both metal and glass, are now obtainable for each size of incandescent electric and gas lamp. For a certain ratio between the spacing and the height of the lamps, a reflector can nearly always be selected which will furnish uniform illumination over the working surface.

Function of reflector.—Owing to the direction of the light from the lamp, nearly all types of lamps, in addition to the downward light, furnish some rays which go upwards and away in other directions from the objects to be illuminated, and are therefore relatively not useful. Furthermore, a bright source in the field of vision, causes an involuntary contraction of the pupil of the eye, which is equivalent to a decrease in illumination in so far as the eye is concerned. Hence, while reflectors or shades may at first seem to reduce the amount of light in the upper part of the room, their use actually increases the amount of light in a downward useful direction, and improves the "seeing" due to the better conditions which surround the eyes. The economic function of the reflector as contrasted to this easier condition it affords the eyes, is to intercept the otherwise useless or comparatively useless rays which do not ordinarily reach the work, and to reflect them in a useful direction. In performing this function, there is a choice through the design of the reflector, in the manner of distributing the light so as to make the illumination on the floor space uniform with certain spacing distances and mounting heights as previously mentioned.

Avoiding dark spots.—With the use of lamps for which a large variety of reflectors is available, the proper reflectors should therefore be chosen so as to give the desired distribution of light. In other cases, as in the use of the gas or electric arc lamps, where the globe or reflector is usually a fixed part of the lamp, care must be exercised

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to space the lamps at sufficiently close intervals to insure uniformity of the illumination; that is, a freedom from the relatively dark spaces which exist between lamps when spaced too far apart.

Light interiors.—With a light ceiling, the reflection of that part of the light which passes through a glass reflector to the ceiling, and which is added to the light thrown downward from the under surface of the reflector, is a factor in building up the intensity of the illumination on the working surface. *Great importance is therefore attached to light interior colors, especially on ceilings and the upper portions of walls, both in reinforcing the direct illumination, and in giving diffusion, which in turn adds to the amount of light received on the side of a piece of work. It should also be stated that the intensity of the light from bare overhead lamps when measured on the working surface may be increased by as much as 60 per cent through the use of efficient reflectors.* This is due to the utilization of the horizontal rays of light as previously stated, which predominate in the bare lamp, whereas the most effective light in factory and millwork is apt to be that which is directed downward.

Points to consider.—Reflectors will not be classified here from the commercial standpoint, but the following items should be given consideration in the selection of the type of reflector for factory or mill use:

1. Utilization efficiency—how much does the reflector contribute to the effective illumination on the work?
2. The effect in reducing glare.
3. Natural deterioration with age through accumulations of dust and dirt.
4. Ease in handling and uniformity of manufacture.
5. Physical strength and the absence of projections which may increase the breakage in case of glass reflectors.

A study of the various reflectors on the market with the aid of these items as a basis will determine what reflectors are best adapted to given conditions.

SECTION 10. SIDE LIGHT IMPORTANT IN SOME FACTORY AND MILL OPERATIONS:

It has been customary in many cases to measure the effectiveness of illumination in terms of the vertically downward component of the light. This method has ignored the value of side components in relation to vertical surfaces and openings in the side of the work. It is sometimes more necessary to light the side of the machine or the side of a piece of work than the horizontal surface. If, then, in designing a factory or mill lighting system the prime object is the production of the greatest amount of downward illumination, it may

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happen that the side component is so small that the sides of machinery or of work are inadequately lighted.

Two ways to secure side light.—Experience indicates that there are two general ways in which to secure adequate side lighting. One of these methods is to lower the lamps, and the other is to use broader distributing reflectors than are called for by the rules which consider uniformity of the downward illumination only. Side walls or other reflecting surfaces will modify the results. Thus, after the determination of a certain type of reflector for producing uniform vertically downward illumination, it may be found that more side light is necessary, and this extra side component may, as stated, usually be secured by selecting a somewhat more distributing reflector. Broader distributing reflectors are apt to result in less downward illumination and will sometimes call for larger lamps than found necessary by preliminary calculations.

Practical case.—As an illustration, in a certain lighting system a vertically downward intensity of about 3 foot-candles was deemed sufficient for the work involved. Measurements and observations showed that the side light was insufficient. In this particular installation it was found necessary to produce a vertically downward intensity of about 5 foot-candles on the average in order to secure an intensity of about 2 foot-candles on the side of the work, and also to use a somewhat broader distributing reflector than at first chosen. Two foot-candles on the sides of the work were sufficient in this case where bench work and work in the vise on small machine parts were conducted.

Keeping the lamps high.—It is recommended that the lamps be mounted near the ceiling in all reasonable cases where side light is necessary, and that the side light be increased *not by lowering the lamps* but through the medium of broader distributing reflectors and larger lamps, if required. This attitude is taken on account of the glare which results when lamps are mounted too close to the work, a feature most noticeable in the absence of a reflector or where glass reflectors are used.

SECTION 11. MAINTENANCE.—PROVISION SHOULD BE MADE FOR SYSTEMATIC UPKEEP OF NATURAL AND ARTIFICIAL LIGHTING:

Windows.—Factory and mill windows become covered in time with dirt and produce greatly decreased values of natural light in consequence. These losses may easily be great enough to affect the workmen seriously and to necessitate the use of artificial light at times when otherwise it would not be required. Dark surroundings also increase the likelihood of accidents. Regular window cleaning should therefore be a part of the routine of every factory and mill building or group of buildings.

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[redacted] and likewise equipments, but in a short time we realized it was for our own good as well as financial gain, for prior to these inspections we had practically no one to show us corrections that were to our advantage.

THE TRANSMISSION OF INFLUENZA.

In connection with the interesting experiments dealing with the unsuccessful attempts to transmit influenza experimentally, reported in Public Health Reports of January 10, 1919, our readers may be interested in the following abstract of some experiments recently reported by Nicolle and Lebailly.[1]

The spread of the epidemic of grippe at Tunis enabled the authors to carry out certain experiments directed toward the search for the microbe of grippe.

In an early experiment they inoculated with the bronchial expectoration of a patient who had been ill for two days and whose expectoration was rich in various bacteria: (1) Without filtration, a Chinese bonnet monkey; (2) with filtration, two subjects who consented to submit to the experiment.

[1] Some experimental observations on the virus of grippe. By Charles Nicolle and Charles Lebailly. Comptes rendus des Séances de l'Académie des Sciences, t. CLXVII, No. 17 October 21, 1918, p. 607.

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The authors give the following conclusions:

1. The bronchial expectoration of grippe patients collected in the acute stage is virulent.

2. The monkey (Chinese bonnet, *M. Cynomolgus*) is sensitive to inoculation with the virus by subconjunctival and nasal channels.

3. The agent of grippe is a filterable organism. The inoculation of the filtrate has, in fact, reproduced the disease in two persons injected subcutaneously; the venous injection on the contrary, appears to be inefficacious (two checks in two trials).

4. It is possible that the grippal virus is not found in the patient's blood. The blood of a grippe monkey, inoculated subcutaneously, has not infected man; the negative result attending the inoculation of the blood of subject No. 2, who was suffering with characteristic grippe, into the veins of a person (*d*) is, on the contrary, not convincing because the venous method appears to be ineffective for the transmission of grippal virus.

ANTIVENEREAL DISEASE WORK IN MICHIGAN.

In the Public Health Reports, volume 34, No. 1 page 2, Michigan was included in the list of States which were not entitled to the benefit of the provisions of the Chamberlain–Kahn Act because they had not passed suitable laws for the control of venereal diseases. This was an error. Michigan has had a venereal disease control law for some time and is cooperating with the Public Health Service.

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Measles	3
Meningitis	1
Mumps	2
Pneumonia	25
Scabies	5
Smallpox	1
Syphilis	5
Tuberculosis	5
Whooping cough	2

BREMERTON ZONE, WASH.

Influenza	126
Measles	1
Mumps	1
Pneumonia	3

CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	
Cerebrospinal meningitis	1
Diphtheria	1
Influenza	277
Scarlet fever	1

CAMP DEVENS ZONE, MASS.

Influenza:	
Ayer	9
Lancaster	21
Townsend	9
Measles:	
Lancaster	1
England	1
Lonoke	7
Lonoke, R. F. D	30
Ward	3
Ward, R. F. D	14

CAMP FUNSTON ZONE, KANS.

Junction City:	
Diphtheria	1
Influenza	3
Mumps	1
Manhattan:	
Chicken pox	1
Diphtheria	4
Influenza	33
Mumps	5
Pneumonia	3
Scarlet fever	3

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Chicken pox:	
Columbus	1
Gonorrhea:	
Columbus	1
Influenza:	
Columbus	128
Girard	14
Muscogee County	34
Phenix City	44

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Influenza	4

CAMP GREENE ZONE, N. C.

Charlotte Township:	
Gonorrhea	9
Influenza	95
Measles	2
Mumps	1
Syphilis	5
Tuberculosis	1

CAMP HANCOCK ZONE, GA.

Influenza:	
Augusta	1,036

CAMP HUMPHREYS ZONE, VA.

Alexandria:	
Chicken pox	1
Gonorrhea	1
Influenza	82
Pleurisy	2
Pneumonia	2
Tonsilitis, follicular	1
Tuberculosis, pulmonary	2
Whooping cough	1
Alexandria County	
Influenza	27
Fredericksburg:	
Chicken pox	1
Gonorrhea	2
Influenza	10
Mumps	2
Syphilis	2

CAMP LEE ZONE, VA.

Chesterfield County:	
Rabies	1
Petersburg:	
Chicken pox	1
Gonorrhea	6
Influenza	102
Measles	1
Pneumonia	5
Scarlatina	1
Syphilis	2
Tuberculosis	1

CAMP LEWIS ZONE, WASH.

Influenza:	
American Lake	6
Lake City	11
Lakeview	10
Parkland	8
Roy	5

CAMP LOGAN ZONE, TEX.

Houston:	
Gonorrhea	15
Syphilis	12
Tuberculosis	1

CAMP M'ARTHUR ZONE, TEX.

Waco:	
Diphtheria	1
Influenza	13
Pneumonia	7
Scarlet fever	1
Tuberculosis	4

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CAMP SHERMAN ZONE, OHIO.

Diphtheria:	
Scioto Township	3
Gonorrhea:	
United States Government clinic	4
Influenza:	
Chillicothe	12
Ross County	26
Pneumonia:	
Chillicothe	2
Scarlet fever:	
Chillicothe	4
Union Township	4
Smallpox:	
Chillicothe	1

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Chancroid:	
United States Government clinic	1
Chicken pox:	
Louisville	1
Diphtheria:	
Louisville	7
Gonorrhea:	
United States Government clinic	15
Venereal clinic, county jail	19
Pneumonia	13
Smallpox	1
Syphilis	5
Tuberculosis	4
Typhoid fever	1

CAMP UPTON ZONE, N. Y.

Diphtheria:	
Riverhead	1
Tuberculosis:	
Brook Haven	1

VANCOUVER ZONE, WASH.

Influenza	367
Measles	1
Scarlet fever	2

CAMP WADSWORTH ZONE, S. C.

Chicken pox:	
Spartanburg	1
Gonorrhea:	
Gastonia	2
Spartan Mill	1
Spartanburg	3
White Stone	1

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period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes):		
All troops in United States	1,515.56	1,265.72
American Expeditionary Forces	887.39	901.02
Annual admission rate per 1,000 (disease only):		
All troops in United States	1,239.29	1,025.88
American Expeditionary Forces	733.05	721.50
Noneffective rate per 1,000 on day of report:		
All troops in United States	50.31	47.34
American Expeditionary Forces	63.96	66.79
Annual death rate per 1,000 (all causes):		
All troops in United States	14.40	10.57
American Expeditionary Forces	30.17	39.88
Annual death rate per 1,000 (disease only):		
All troops in United States	13.28	9.98
American Expeditionary Forces	7.76	9.24

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Meade	68			31	3	69	8	2	2	993.17	34.36
Pike	7			15	7	52	9	1	1	1,112.39	33.01
Sherman	10			29	7	15	7	3	1	1,008.71	59 58
Taylor	6			15		51	4			817.69	60.76
Travis	7			10		43	9		6	2,421.02	24.84
Upton	6			21	9	11	2	3	4	827.93	75.71
Northeastern Department	5			32	2	79	14			1,121.61	72.23
Eastern Department	2			19	1	4			1	2,921.46	72.97
Southeastern Department	9			9	6	9			2	4,070.79	86.70
Central Department	2			15	4	66				1,167.71	82.30
Southern Department				12	3	24				878.31	37.01
Western Department	18			2		21				822.65	23.83
Aviation camps	2			82	7	130	3	1	1	1,823.07	26.85
Port of embarkation:	98			11	2	30				1,125.55	31.80
Hoboken	9			72		503	5		1	716.66	43.53
Newport News	16			17	3	126	15	1	1	1,430.81	22.35
Alcatraz Disciplinary Barracks				128	4	15	5	3		1,738.96	48.84
Leavenworth Disciplinary Barracks	1									3,656.11	124.82
Jefferson Barracks	1			1						939.75	121.28
Columbus Barracks	5			5	3	18	5			1,693.26	15.05
Fort Logan				4	3					1,547.99	47.47
Fort McDowell	4			4		2				1,233.20	70.47
Fort Sill				1		7				1,180.51	74.30
Fort Slocum				17	17	37				1,581.08	38.64
Fort Thomas				15	2	1				488.14	56.17
West Point	4			2					1	641.93	22.57
Arsenals	2									1,591.83	23.38
Miscellaneous small stations	6	1		19		26	2			1,277.99	56.68
				21		8	3			795.55	29.49
Total	567	1	1	1,228	170	1,888	182	19	65	1,239.29	33.15
											50.31

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Number of deaths and annual rates per 1,000 at large camps in United States, week ended Jan. 10, 1919.

Camp.	Strength.	Deaths.		Deaths, annual rate per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Beauregard	10,215	0	0		
Bowie	6,003	1	1	8.66	8.66
Cody	2,490	0	0		
Forrest	1,156	3	3	134.94	134.94
Fremont	3,456	1	1	15.04	15.04
Greene	7,431	3	2	21.08	14.06
Greenleaf	4,060	0	0		
Hancock	17,265	21	21	63.23	63.23
Kearny	14,782	3	3	10.55	10.55
Logan	11,382	1	1	4.56	4.56
MacArthur	7,717	1	1	6.73	6.73
McClellan	18,448	10	10	28.18	28.18
Sevier	7,176	2	2	14.49	14.49
Shelby	14,101	2	2	7.37	7.37
Sheridan	6,704	1	0	15.51	
Wadsworth	6,932	2	2	15.00	15.00
Wheeler	2,350	0	0		
Custer	29,868	1	1	1.74	1.74
Devens	25,134	2	2	4.13	4.13
Dix	21,087	5	3	12.32	7.37
Dodge	23,593	0	0		
Eustis	5,132	2	1	20.26	10.13
Funston	36,000	8	7	11.55	9.11
Gordon	19,423	3	3	8.03	8.03
Grant	23,979	5	5	10.84	10.84
Humphreys	12,918	5	5	20.12	20.12
Jackson	21,999	7	5	16.54	11.82
J. E. Johnston	5,870	2	2	18.44	18.44
Henry Knox	7,391	0	0		
Las Casas	3,665	1	1	14.18	14.18
Lee	27,439	8	7	15.16	13.03
Lewis	30,735	2	2	3.38	3.38
Meade	36,627	2	2	2.83	2.83
Pike	15,983	3	3	9.76	9.76
Sherman	17,536	6	6	17.78	17.78
Taylor	21,279	12	12	29.32	29.32
Travis	19,325	3	2	8.07	5.38
Upton	14,687	2	2	7.07	7.07
Northeastern Department	5,700	2	2	18.24	18.24
Eastern Department	31,261	8	6	13.33	10.01
Southeastern Department	10,239	3	3	15.23	15.23
Central Department	4,307	1	1	12.07	12.07
Southern Department	45,827	13	13	14.75	14.75
Western Department	12,475	5	5	20.83	20.83
Aviation camps	73,744	31	26	21.86	18.34
Port of embarkation:					
Hoboken	33,878	6	6	9.20	9.20
Newport News	31,289	11	9	18.28	14.95
All others	121,462	48	46	20.54	19.65
Total	981,459	258	233	14.40	12.98

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	31.65	27.80	26.77	24.47
Dysentery	0.05	0.16	1.46	2.40
Malaria	0.05	3.27	0.13	0.06
Venereal	68.55	54.25	27.40	28.15
Paratyphoid	0.0	0.0	0.16	0.24
Typhoid	0.30	0.21	1.27	1.22
Measles	10.15	12.88	5.13	3.62
Meningitis	1.06	0.75	2.07	1.96
Scarlet fever	3.68	3.11	0.71	1.06
Influenza	105.39	67.73		

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CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended January 18, 1919.

Alabama.—State totals: Typhoid fever 3, smallpox 106, scarlet fever 12, diphtheria 3, cerebrospinal meningitis 1, influenza 1,525.

Arkansas.—Influenza: Calico Rock 500, Hempstead 150 this week (245 delayed), Izard 143 cases (death 1, pneumonia), Bradley 133, Iuka 110 cases (deaths 3, pneumonia), Marianna 98, Camden 69, Mansfield 60, Hot Springs 40, Blytheville 30, Drew 20, Fayetteville 21, Stamps 16 cases (death 1, pneumonia), Traskwood 15, Rogers 15, Hope 14, St. Francis 14, Hartford 12, Dermott 10, Shirley 10, Faulkner 9, other places 23. State totals: Smallpox 17, malaria 43, typhoid fever 8, tuberculosis 7, scarlet fever 1, meningitis 1, measles 6.

California.—Influenza: Total for week 14,600 (total from beginning of epidemic to date 278,600); reports show that disease is still prevalent in vicinity of Los Angeles and San Francisco. Fourteen cases of smallpox reported as follows: Fresno County 1, Visalia 2, Chico 1, Santa Cruz 1, Watsonville 5, Long Beach 4. Other communicable diseases maintain the seasonal balance.

Connecticut.—No outbreak nor unusual prevalence. Influenza total for State 1,502 cases.

Florida.—State totals: Typhoid fever 6, malaria 16, scarlet fever 5, diphtheria 6, influenza 577, epidemic meningitis 1, pneumonia 23. Influenza: By counties—Alachua 176, Citrus 15, De Soto 2, Duval 2, Franklin 1, Gadsden 14, Hillsboro 20, Lafayette 1, Lake 4, Levy 58, Marion 18, Nassau 6, Pasco 1, St. Lucie 12, Volusia 38; by cities—Jacksonville 202, Pensacola 6, Tampa 1.

Illinois.—Diphtheria: 174, of which in Chicago 142, Morton Grove 7. Scarlet fever: 97, of which in Chicago 60, Lake Bluff 7. Smallpox: 72, of which in Elgin 14, Normal 8, Schram City 12, Jacksonville 7, Pekin 7. Meningitis: Chicago 4. Poliomyelitis: Chicago 1, Blurstand 1. Syphilis 59. Gonorrhea 112. Total new cases influenza 3,506. Recrudescence of influenza noted in following Illinois communities: Sparta 211 cases, Jacksonville 180, Percy 83, Neponset and Neponset Township 76, Evanston 41, Palestine 51, Kewanee 51, Chesterfield and Chesterfield Township 107, Normal 76, Woodson 44, Wilberton Township (Fayette County) 64, Cave Township (Franklin County) 36, Peoria 96, Mount Carmel, many new cases.

Indiana.—Syphilis 20, gonorrhea 36. Diphtheria: Grant County 6, Fulton 1, Wayne 1, Wabash 1, Rush 1, Tipton 1, Laporte 1, Whitley 1, Marshall 2, Posey 1. Influenza 298.

Iowa.—Chancroid: Marshalltown 1. Diphtheria: Council Bluffs 2, Des Moines 3, Dubuque 1, Eagle Grove 1, Mason City 2. Gonorrhea: Alta Vista 1, Cedar Rapids 1, Council Bluffs 9, Davenport 3, Dubuque 2, Manilla 6, Marshalltown 6, Sioux City 17. Scarlet fever: Burling-

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10. Syphilis: Portland 8, Paris 1, Lewiston 1. Tuberculosis: Six cases. Typhoid fever: Ashland 1, Dover 1, Standish 1. Whooping cough: Ashland 5, Robinson 14, Portland 1, Auburn 3, Deer Isle 2. Influenza: Auburn 15, Gardiner 13, Lewiston 15, Portland 31, Bethel 21, Paris 50, Eastport 18, Belgrade 15, Deer Isle 30, Franklin 15, Friendship 15, Jonesport 52, Orland 15, Sherman 34, Smyrna Mills 14, scattered cases 174.

Massachusetts.—Unusual prevalence. Influenza: 5,259 cases, scattered through State.

Minnesota.—Smallpox (new foci): Blue Earth County, Cresco Township, 1; Dakota County, Lakeville Township, 1; Rock County, Rosedale Township, 1; Magnolia village, 1; Washington County, Lincoln Township, 1; Wright County, Cokato village, 1. Poliomyelitis 1, syphilis 46, gonorrhea 47, chancroid 1.

Mississippi.—No unusual outbreak. Influenza prevalent, but distribution general.

Montana.—Incomplete report, 651 cases influenza. (Week ended January 11).

New Jersey.—Influenza: 2,442 cases. Pneumonia: 392 cases. Smallpox: Millville City, 1 case. No unusual prevalence of other diseases.

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New York.—Communicable diseases outside of New York City: Diphtheria 213, of which in Buffalo 41, Rochester 32; measles 134, scarlet fever 138, of which in Buffalo 29, Rochester 15; typhoid fever 23, pneumonia 283. Voluntary reports: Syphilis 192, gonorrhea 24.

North Carolina.—Influenza: By counties—Alamance 3, Catawba 5, Chatham 7, Cleveland 165, Cumberland 58, Currituck 16, Davidson 300, Gaston 110, Johnston 54, Montgomery 55, New Hanover County and city of Wilmington 141, Pitt 385, Rockingham 35, city of Charlotte 85. Whooping cough 40, measles 34, diphtheria 21, scarlet fever 12, septic sore throat 3, smallpox 33, chicken pox 10, infantile paralysis 1, typhoid fever 11, epidemic meningitis 4, broncho pneumonia 51, lobar pneumonia 36, ophthalmia neonatorum 2.

Ohio.—Smallpox: Hamilton 19 cases, St. Clair Township (Butler County) 9 cases. Influenza shows gradual decline. Venereal diseases 126 cases.

Oklahoma.—Influenza: By counties—Alfalfa 46, Beaver 34, Blaine 52, Cleveland 84, Coal 130, Comanche 130, Grady 50, Haskell 153, Kingfisher 62, Latimer 3, Noble 42, Okfuskee 45, Pittsburg 359, Seminole 157, Sequoyah 338, Stephens 26, Washita 20, Woods 35.

Oregon.—Influenza: Portland city 1,840 cases (115 deaths); by counties—Benton 14, Clackamas 77, Clapsop 24, Columbia 9, Coos 14, Gilliam 6, Hood River 35, Jackson 18, Jefferson 3, Lane 17, Lincoln 17, Linn 40 (3 deaths), Marion 45, Multnomah 19, Tillamook 5, Union 2, Wasco 39 (2 deaths), Washington 32.

Vermont.—Influenza: 1,122 cases from 45 towns. No other unusual prevalence.

Virginia.—Smallpox: Norfolk County 3 cases, Lunenburg 1, Rockingham 4. Cerebrospinal meningitis: Norfolk County 3 cases Influenza: Reported in State 854 cases.

Washington.—No unusual outbreaks of disease. Seventeen cases of smallpox and 10 cases of scarlet fever in Yakima County. Influenza increasing in some localities and decreasing in others; 200 more cases reported this week over last week.

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Boston, Mass		1	Philadelphia, Pa		1
Brunswick, Ga	1		Providence, R. I	1	1
Canton, Ill		1	Quincy, Mass		1
Charlotte, N. C	1		Reading, Pa	1	
Chicago, Ill	1		Roanoke, Va	1	1
Englewood, N. J	1		Syracuse, N. Y	1	
Galesburg, Ill		1	Waltham, Mass	1	
Louisville, Ky		2	Westfield, Mass		1
Memphis, Tenn	1				

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 18, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	2	Camp Zachary Taylor zone, Ky. and Ind	1
Camp Joseph E. Johnston zone, Fla	5	Tidewater health district, Va	2
Camp Sheridan zone, Ala	4	Camp Travis zone, Tex	2

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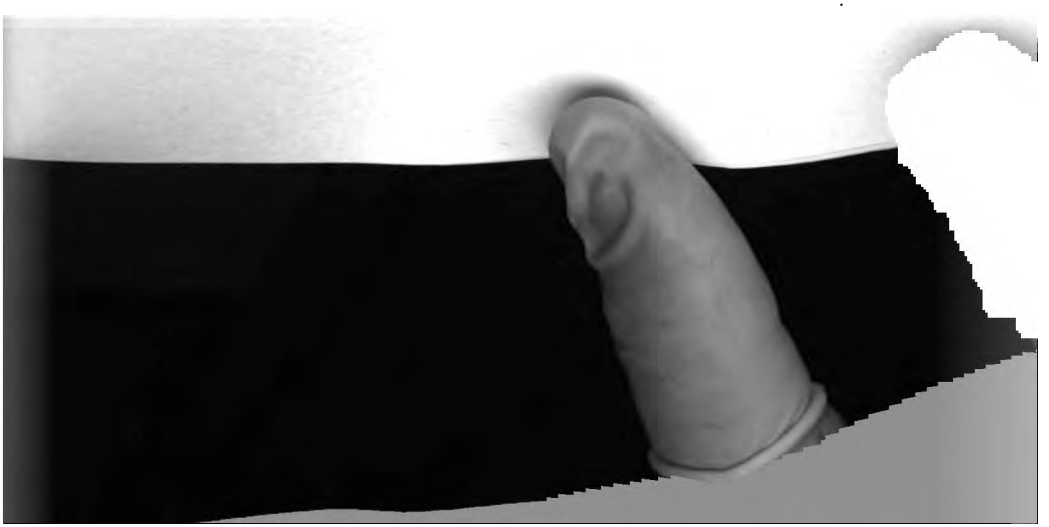
Camp Logan zone, Tex	15	Wilmington sanitary district, N. C	1

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 18, 1919.

	Cases.		Cases.
Camp Beauregard zone, La	126	Camp MacArthur zone, Tex	18
Camp Bowie zone, Tex	11	Camp Merritt zone, N. J	99
Bremerton zone, Wash	126	Fort Oglethorpe zone, Ga. and Tenn	28
Charleston sanitary district, S. C	277	Picric Acid Plant zone, Ga	32
Camp Devens zone, Mass	39	Camp Pike zone, Ark	668
Camp Dix zone, N. J	42	Camp Polk zone, N. C	634
Camp Doniphan zone, Okla	27	Portsmouth and Norfolk County health district, Va	325
Camp Eberts zone, Ark	82	Portsmouth-Kittery sanitary district, N. H. and Me	41
Camp Funston zone, Kans	36	Camp Sevier zone, S. C	401
Gas and Flame School zone, Ga. and Ala	220	Camp Sheridan zone, Ala	21
Gerstner Field zone, La	62	Camp Sherman zone, Ohio	38
Camp Gordon zone, Ga	165	Camp Zachary Taylor zone, Ky. and Ind	180
Camp Greene zone, N. C	95	Tidewater health district, Va	27
Camp Hancock zone, Ga	1,033	Camp Travis zone, Tex	253
Camp Humphreys zone, Va	119	Vancouver zone, Wash	367
Camp Jackson zone, S. C	337	Camp Wadsworth zone, S. C	172
Camp Joseph E. Johnston zone, Fla	159	Camp Wheeler zone, Ga	103
Fort Leavenworth zone, Kans	45	Wilmington sanitary district, N. C	277
Camp Lee zone, Va	102		
Camp Lewis zone, Wash	40		



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Camp Jackson zone, S. C.	2	Vancouver zone, Wash.	
Camp Joseph E. Johnston zone, Fla.	22	Camp Wadsworth zone, S. C.	
Camp Lee zone, Va.	1	Camp Wheeler zone, Ga.	
Fort Oglethorpe zone, Ga. and Tenn.	5		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 144.

PELLAGRA.

City Reports for Week Ended Jan. 4, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga.		2	Memphis, Tenn.	2	
Birmingham, Ala.		2	Mobile, Ala.		1
Charlotte, N. C.		1	Nashville, Tenn.		1
Danville, Va.		1	Norfolk, Va.		1
Fort Worth, Tex.	1		Wilmington, N. C.	1	1
Greensboro, N. C.		1			

PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 18, 1919.

	Cases.		Cases.
Camp Beauregard zone, La.	2	Picric Acid Plant zone, Ga.	1
Camp Bowie zone, Tex.	25	Camp Pike zone, Ark.	49
Bremerton zone, Wash.	3	Camp Polk zone, N. C.	2
Camp Funston zone, Kans.	3	Portsmouth and Norfolk County health district, Va.	1
Gas and Flame School zone, Ga. and Ala.	15	Camp Sevier zone, S. C.	15
Camp Gordon zone, Ga.	1	Camp Sheridan zone, Ala.	3
Camp Humphreys zone, Va.	2	Camp Sherman zone, Ohio.	2
Camp Jackson zone, S. C.	1	Camp Zachary Taylor zone, Ky. and Ind.	2
Camp Joseph E. Johnston zone, Fla.	7	Tidewater health district, Va.	4
Fort Leavenworth zone, Kans.	1	Camp Travis zone, Tex.	13
Camp Lee zone, Va.	5	Camp Wheeler zone, Ga.	5
Camp MacArthur zone, Tex.	7	Wilmington sanitary district, N. C.	6
Camp Merritt zone, N. J.	1		
Fort Oglethorpe zone, Ga. and Tenn.	2		

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	6	2
Fall River, Mass.	7	4
Findlay, Ohio	3	1
Fort Worth, Tex	4	4
Glens Falls, N. Y.	29	11
Grand Rapids, Mich.	1	.....
Greenwich, Conn	15	8
Hackensack, N. J.	5	.....
Hartford, Conn	3	5
Haverhill, Mass.	1	4
Highland Park, Mich.	51	14
Ithaca, N. Y.	15	2
Jamestown, N. Y.	1	.....
Jersey City, N. J.	11	4
Johnstown, N. Y.	8	.....
Joplin, Mo.	1	1
Kalamazoo, Mich.	1	.....
Kansas City, Kans.	8	4
Kansas City, Mo.	7	.....
Kearny, N. J.	4	16
Lackawanna, N. Y.	3	1
Lakewood, Ohio	5	7
Lawrence, Mass.	2	2
Long Branch, N. J.	10	6
Los Angeles, Cal.	5	2
Louisville, Ky.	26	11
Lowell, Mass.	1	14
	4	3

Portsmouth, Va.	3	4
Richmond, Va.	1	8
Riverside, Cal.	1	1
Rochester, N. Y.	21	8
Rome, N. Y.	1	.....
Sacramento, Cal.	9	8
Sandusky, Ohio	4	.....
San Francisco, Cal.	33	19
Saratoga Springs, N. Y.	2	.....
Sault Ste. Marie, Mich.	2	1
Somerville, Mass.	2	3
Spartanburg, S. C.	1	.....
Springfield, Mass.	16	6
Stockton, Cal.	7	4
Trenton, N. J.	5	3
Tyler, Tex.	4	.....
Utica, N. Y.	1	3
Waltham, Mass.	2	1
Waterbury, Conn.	6	4
Watertown, Mass.	5	1
Westfield, Mass.	1	1
West Orange, N. J.	1	1
Wilmington, Del.	6	6
Wilmington, N. C.	1	2
Winston-Salem, N. C.	1	.....
Winthrop, Mass.	2	.....
Yonkers, N. Y.	20	10

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SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 18, 1919.

	Cases.
Charleston sanitary district, S. C	1
Camp Doniphan zone, Okla	2
Camp Funston zone, Kans	3
Camp MacArthur zone, Tex	1
Camp Merritt zone, N. J	2
Camp Pike zone, Ark	2
Camp Polk zone, N. C	3
Portsmouth and Norfolk County health district, Va	1
Portsmouth-Kittery sanitary district, N. H. and Me	1
Camp Sherman zone, Ohio	8
Tidewater health district, Va	1
Vancouver zone, Wash	2
Camp Wheeler zone, Ga	2

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 144.

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[redacted]mphreys zone, Va	2	Camp Sheridan zone, Ala	11
Camp Jackson zone, S. C	9	Camp Zachary Taylor zone, Ky. and Ind	44
Camp Joseph E. Johnston zone, Fla	7	Tidewater health district, Va	2
Fort Leavenworth zone, Kans	7	Camp Travis zone, Tex	5
Camp Lee zone, Va	2	Camp Wheeler zone, Ga	2

TETANUS.

City Reports for Week Ended Jan. 4, 1919.

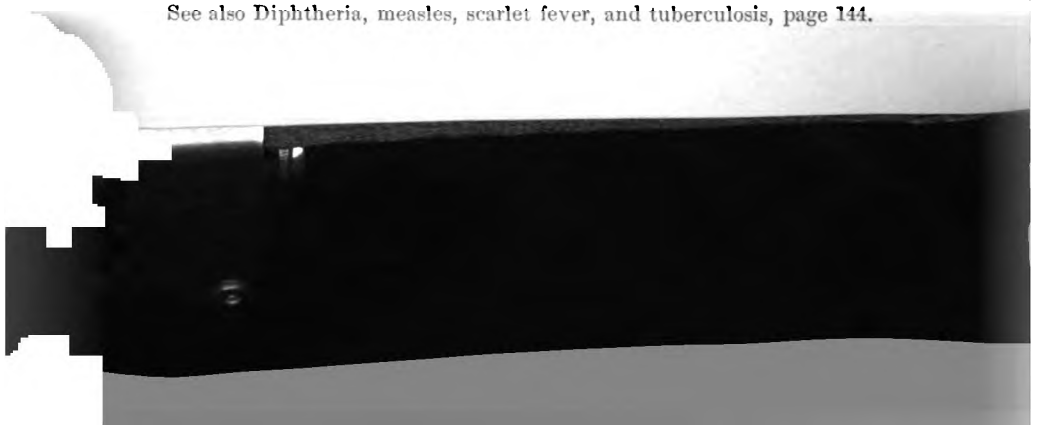
Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Chicago, Ill	1	1	Newark, N. J	1	
Indianapolis, Ind		1	Philadelphia, Pa		1
Lancaster, Ohio	1	1			

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 18, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	5	Camp Pike zone, Ark	6
Gas and Flame School zone, Ga. and Ala	3	Portsmouth and Norfolk County health district, Va	3
Camp Gordon zone, Ga	1	Portsmouth-Kittery sanitary district, N. H. and Me	1
Camp Greene zone, N. C	1	Camp Zachary Taylor zone, Ky. and Ind	10
Camp Humphreys zone, Va	2	Tidewater health district, Va	2
Camp Jackson zone, S. C	2	Camp Travis zone, Tex	4
Camp Joseph E. Johnston zone, Fla	2	Camp Upton zone, N. Y	1
Fort Leavenworth zone, Kans	1	Camp Wadsworth zone, S. C	1
Camp Lee zone, Va	1	Wilmington sanitary district, N. C	4
Camp Logan zone, Tex	1		
Camp MacArthur zone, Tex	4		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 144.



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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOS

State Reports for December, 1918.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
Connecticut	259	245	187	Montana	11	15	42
District of Columbia	67	10	23	Wisconsin	126	59	188
New York	642	269	460				

City Reports for Week Ended Jan. 4, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Abilene, Tex	14,954	4	2	.....	.....	.....	.....	.....	1	.....
Adams, Mass	14,406	4	.....	.....	.....	.....	.....	.....	.....	.....
Adrian, Mich	11,570	5	1	.....	.....	.....	.....	.....	.....	.....
Akron, Ohio	93,604	39	1	.....	3	.....	.....	.....	4	.....
Alameda, Cal	28,433	16	1	.....	.....	.....	.....	.....	.....	.....
Alexandria, La	16,232	10	.....	.....	1	.....	.....	.....	.....	.....
Allentown, Pa	65,109	.....	2	.....	.....	.....	1	.....	.....	.....
Alliance, Ohio	19,581	21	.....	.....	.....	.....	.....	.....	.....	.....
Alton, Ill	23,783	7	.....	.....	1	.....	.....	.....	.....	1
Altoona, Pa	59,712	.....	17	.....	1	.....	.....	.....	.....	.....
Anderson, Ind	24,230	12	.....	.....	.....	.....	.....	.....	.....	.....
Ann Arbor, Mich	15,041	6	.....	.....	.....	.....	.....	.....	.....	.....
Ansonia, Conn	16,954	9	.....	.....	.....	.....	.....	.....	.....	1
Appleton, Wis	18,005	8	.....	.....	.....	.....	.....	.....	.....	.....
Arlington, Mass	13,073	8	3	.....	.....	.....	2	.....	.....	.....
Asbury Park, N. J	14,629	7	.....	.....	.....	.....	.....	.....	.....	.....
Asheville, N. C	25,656	.....	.....	.....	3	.....	.....	.....	6	.....
Ashtabula, Ohio	22,008	8	.....	.....	.....	.....	.....	.....	.....	.....
Atlanta, Ga	196,144	82	.....	.....	.....	.....	1	1	3	3
Atlantic City, N. J	59,515	18	.....	.....	.....	.....	.....	.....	2	1
Attleboro, Mass	19,776	11	.....	.....	.....	.....	2	.....	.....	.....
Auburn, N. Y	37,823	12	.....	.....	.....	.....	4	.....	.....	.....

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Berkeley, Cal.	60,427	33	3							
Biddeford, Me.	17,760	3								
Billings, Mont.	15,123									
Binghamton N. Y.	54,864	17	3							
Birmingham, Ala.	189,716	81	1							
Bloomfield, N. J.	19,013	3	1							
Bloomington, Ind.	11,661	2								
Bluefield, W. Va.	16,123		2							
Boise, Idaho	35,951	20								
Boston, Mass.	767,813	488	71							
Bradford, Pa.	[1] 14,544									
Brazil, Ind.	10,472	6								
Bridgeport Conn.	124,724	50	6						3	4
Bristol, Conn.	16,318	3								
Brockton, Mass.	69,152	25					1		2	
Brookline, Mass.	33,526	15	3				1			
Brunswick, Ga.	10,984	5			10					
Buffalo, N. Y.	475,781	174	46	7	34		15	1	26	10
Burlington, Iowa.	25,144	10								
Burlington, Vt.	21,802	12			1		2			1
Butte, Mont.	44,057		2		1		2			
Cairo, Ill.	15,995	6								
Cambridge, Mass.	114,293	72	1		2		1		2	6
Camden, N. J.	108,117		5				10		3	
Canton, Ohio	62,566	27			1					
Carlisle, Pa.	10,795		2							
Champaign, Ill.	15,052	7								
Chanute, Kans.	12,968	3								1
Charleston, S. C.	61,041	43	1							1
Charleston, W. Va.	31,060	9	1		1					1
Charlotte, N. C.	40,759	29								2
Chelsea, Mass.	48,405	26	1						3	2
Cheyenne, Wyo.	[1] 11,320	1								
Chicago, Ill.	2,547,201	896	127	19	62	4	24	2	233	64
Chicopee, Mass.	29,950	12	2							2
Chillicothe, Ohio	15,625	2	1				1			
Cincinnati, Ohio	414,248	142	4						10	12
Cleveland, Ohio	692,259	298	21	4	6	1	8		12	13
Clinton, Iowa	27,678		2							
Clinton, Mass.	[1] 13,075	10								2
Cohoes, N. Y.	25,292	3					1			
Colorado Springs, Colo.	38,965	19					1			4
Columbia, S. C.	35,165				1					
Columbus, Ohio	220,135	79			1		3		4	10
Concord, N. H.	22,858	9					2			2
Corpus Christi, Tex.	10,789	3								
Council Bluffs, Iowa.	31,838	8	1							
Covington, Ky.	59,623	26	1						2	4
Cranston, R. I.	26,773	7					1			
Cumberland, Md.	26,686	8								
Dallas, Tex.	129,738	41	1	1						2
Danville, Ill.	32,969	15								1
Danville, Va.	20,183	11								1
Dayton, Ohio	128,939	46	1				2		4	
Decatur, Ill.	41,483	19	1		1					1
Dedham, Mass.	10,618	5								
Denver, Colo.	268,439	130	2		4		6			22
Des Moines, Iowa.	104,052		4				4			
Detroit, Mich.	619,648	356	90	3	2		38	2	30	15
Dover, N. H.	13,276	4								

[1] Population Apr. 15, 1910.

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								4		7	
										1	1
					1					1	
				1	1			3			3
								1			
Whitinsburg, Pa.			2					1		2	
Wilmington, Del.	23,899		1					1		1	
Wilmington, N. C.	95,369	38	3					1		1	1
Winchester, Mass.	30,400	16				1		1			1
Winona, Minn.	10,812	2									
Winston-Salem, N. C.	[1]18,583	7									
Winthrop, Mass.	33,136	16								3	2
Woburn, Mass.	13,105									1	
Yonkers, N. Y.	16,076	5									1
Zanesville, Ohio.	103,066	34	4					1		8	2
	31,320	10	1								

[1] Population Apr. 15, 1910.

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FOREIGN.

BRAZIL.

Influenza—Bahia—Interior of State.

Influenza was reported present at Bahia during the months of September and October, 1918, with an estimated number of more than 5,000 cases. The type of the disease is stated to have been mild. On November 7, 1918, the epidemic was reported to be decreasing. On the same date influenza was reported prevalent in the interior of the State of Bahia.

Mortality, Sept. 1–Oct. 31, 1918—Bahia.

The total number of deaths reported at Bahia from September 1 to October 31, 1918, was 1,172. The number of deaths reported from influenza was 217.

DOMINICAN REPUBLIC.

Further Relative to Influenza.[1]

Influenza was reported present with many cases in various parts of the Dominican Republic from about December 14, 1918. On December 23 the spread of the disease was stated to have been very rapid, and during the week ended December 21, 4,521 cases with 78 fatalities were reported for the entire Republic. The cases were distributed as follows: Puerta Plata, 2,417 cases with 31 fatalities; Santo Domingo, 1,065 cases with 28 fatalities, the remaining cases being scattered. (Population, Puerta Plata, 15,000; Santo Domingo, 20,000.)

GREAT BRITAIN.

Epidemic Influenza—Nottingham.

On December 9, 1918, epidemic influenza was reported as having been severely prevalent at Nottingham for several weeks previous. During the first week in December,1918, out of 300 deaths from all causes 226 were attributed to influenza, bronchitis, and pneumonia, as compared with 385 deaths from those causes reported during the preceding week.

[1] Public Health Reports, Dec. 27, 1918, p. 2354.

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Examination of Rats—Liverpool.

During the period from September 8 to December 1, 1918, 1,663 rats were examined at Liverpool. No plague infection was found.

MADAGASCAR.

Quarantine Against South Africa for Influenza.

By official notification of October 19, 1918, vessels arriving from South Africa were refused admission to ports in Madagascar and dependencies, excepting the ports of Diego-Suarez, Majunga, and Tamatave, where said vessels were made subject to quarantine measures against influenza.

SOCIETY ISLANDS.

Influenza.[1]

Epidemic influenza was reported, December 21, 1918, to be abating at Papeete, Island of Tahiti, but to be actively present in every district of the island, especially in Hitiaa and Tiarei. In the islands of Moorea, Raiatea, Makatea, Bora Bora, and several others, many fatalities from influenza have been reported and the epidemic was stated to be still seriously prevalent. In Moorea, 200 fatalities, occurring within a few days, had been reported in a population numbering barely 1,200. In Makatea, out of a population of less than 800, 80 fatalities were reported to December 15, 1918, and the epidemic was stated to be still present. In the island of Raiatea, in the town of Uturoa, with a population of about 500, 70 fatalities from influenza had been reported. In Bora Bora a high rate of mortality was reported.

A notable feature in the outbreak of influenza in the Society Islands is that the islands constitute a colony cut off from the rest of the world by its situation in the midst of a vast ocean and having steamship communication limited to one passenger and mail steamship calling every month or every two months and only at one port.

SWITZERLAND.

Correction.

The statement that cholera was present in Switzerland July 26, 1918, which appeared in the Public Health Reports August 2, 1918, page 1307, and in succeeding numbers, was erroneous.

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[1] Public Health Reports, Dec. 13, 1918, p. 2245, and Jan. 17, 1919, p. 98.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Jan. 24, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Oct. 27-Nov. 9	11	4	
Java:				
East Java—				
Surabaya	Oct. 22-28	65	60	
Mesopotamia:				
Baghdad	Sept. 14-Oct. 4	7		
Philippine Islands:				
Manila	Nov. 17-23	12	10	
Provinces				Nov. 17-23, 1918: Cases, 19; deaths, 124.
Bataan	Nov. 17-23	4	1	
Batangas	do	12	8	
Bohol	do	8	2	
Bulacan	do	2	1	
Cavite	do	11	9	
Iloilo	do	14	10	
Mindoro	do	2	1	
Misamis	do	18	5	
Oriental Negros	do	4	4	
Pangasinan	do	91	72	
Sorsogon	do	8	4	
Tayabas	do	2	1	
Manila	Nov. 24-30	6	2	
Provinces				Nov. 24-30, 1918: Cases, 98; deaths, 194.
Bataan	Nov. 24-30	15	13	
Batangas	do	31	23	
Bohol	do	2	2	
Bulacan	do	4	4	
Cavite	do	32	16	
Cebu	do	23	14	
Iloilo	do	39	38	
Mindoro	do	4	5	
Misamis	do	12	10	
Pampanga	do	2	2	
Pangasinan	do	48	60	
Rizal	do	16	5	
Tayabas	do	10	7	

PLAGUE.

India				Oct. 27-Nov. 9, 1918: Cases, 4,000; deaths, 3,702.
Bombay	Oct. 20-Nov. 9	2	2	
Java:				
East Java—				
Surabaya (district)	Oct. 22-28	12	12	
Venezuela:				
Caracas	Dec. 30	1		

SMALLPOX.

Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Digby	do			Do.
Halifax	do	4		
Middleton	do			Do.
Quebec—				
Montreal	do	1		
China				
Amoy	Nov. 19-26			Do.
Chungking	Nov. 10-16			Do.
India				
Bombay	Nov. 3-9	1		
Java				
East Java				
Surabaya District	Oct. 22-28	4		

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Jan. 24, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Newfoundland:				
Avondale	Dec. 28-Jan. 3	1		
St. Johns	do	4		
Portugal:				
Lisbon	Nov. 24-30	208		
Spain:				
Valencia	Sept. 22-Dec. 7	9	2	

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-30		1	
Colombia:				
Barranquilla	Dec. 22-28		1	
Japan:				
Nagasaki	Nov. 2-Dec. 1	2	1	
Spain:				
Huelva	Oct. 1-31		2	

YELLOW FEVER.

Brazil:				
Pernambuco	Oct. 1-15		1	

Reports Received from Dec. 28, 1918, to Jan. 17, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Aug. 18-Oct. 5	15	11	
Calcutta	Sept. 29-Nov. 2		19	
Madras	Oct. 5-26	36	18	
Rangoon	Oct. 5-12	1	1	
Indo-China:				
Anam	Aug. 1-31	5	5	
Cambodia	do	98	71	
Cochin-China	do	110	89	
Saigon	Oct. 7-Nov. 10	18	12	
Tonkin	Aug. 1-31	1		
Java:				
East Java				Oct. 7-21, 1918: Cases, 109; deaths, 94.
Surabaya	Oct. 7-21	7	6	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 1,389; deaths, 867.
Samarang	Sept. 25-Oct. 16	120	111	
West Java				Oct. 2-23, 1918: Cases, 190; deaths, 112.
Batavia	Oct. 2-23	140	84	
Mesopotamia:				
Bagdad	Oct. 11-18	1		
Philippine Islands:				
Manila	Nov. 3-9	28	16	
Provinces				Nov. 2-9, 1918: Cases, 511; deaths, 417.
Batangas	Nov. 2-9	156	141	
Bohol	do	19	17	
Bulacan	Oct. 27-Nov. 2	5	6	
Cavite	do	38	28	
Iloilo	do	9	6	
Laguna	Oct. 27-Nov. 2	2	2	
Misumis	do	6	5	
Oriental Negros	Nov. 2-9	20	8	
Pangasinan	do	236	192	

[1] From medical officers of the Public Health Service, American consuls, and other sources. For reports received from June 29 to Dec. 27, 1918, see Public Health Reports for Dec. 27, 1918. The tables of epidemic diseases are terminated semiannually and new tables begun.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Jan. 17, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Contd.				
Manila—Contd.				
Rizal	Oct. 27-Nov. 2	3	1	
Tayabas	Nov. 2-9	7	4	
Union	do	7	5	
Russia:				
Petrograd	To July 16	3,288	1,054	
Do	July 17-Aug. 21	2,943	1,455	In civil hospitals. In military hospitals, July 6-Aug. 21, 1918: Cases, 884, deaths, 783.

PLAGUE.

China:				
Amoy				Present.
Hongkong	Oct. 26-Nov. 2	1	1	
Do	Nov. 9-16	1	1	
Nanking	Nov. 2-9			Always prevalent.
Ecuador:				
Guayaquil	Nov. 1-30	5	3	
Egypt				Jan. 1-Nov. 21, 1918: Cases, 37; deaths, 153.
India				Sept. 23-Oct. 26, 1918: Cases, 12,475; deaths, 9,644.
Bombay	Aug. 18-Oct. 19	32	21	
Karachi	Oct. 19-26	16	16	
Madras Presidency	Oct. 13-26	200	135	
Rangoon	Oct. 5-12	22	22	
Indo-China:				
Anam	Aug. 1-31	15	10	
Cambodia	do		23	
Cochina-China	do	14	11	
Saigon	Oct. 7-Nov. 3	3	1	
Java:				
East Java				Oct. 7-21, 1918: Cases, 17; deaths, 17.
Surabaya	Oct. 7-21	3	3	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 14, deaths, 14.
Samarang	Sept. 25-Oct. 16	6	6	
Siam:				
Bangkok	Sept. 21-28	4	3	
Do	Oct. 5-12	2	2	

SMALLPOX.

Algeria:				
Algiers	Oct. 1-31	1		
Canada:				
New Brunswick—				
St. John	Nov. 8-14	3		
Nova Scotia—				
Halifax	Dec. 7-28	10		
Quebec—				
Montreal	Nov. 24-Dec. 21	2		
Quebec	Dec. 15-21	1		
Canal Zone:				
Colon	Dec. 15-21	1		
China:				
Amoy	Oct. 13-20			Present.
Do	Oct. 28-Nov. 4			Do.
Canton	Nov. 17-23			Do.
Denmark:				
Copenhagen	Nov. 9-23	5		
India:				
Bombay	Aug. 18-Oct. 19	11	3	
Calcutta	Sept. 29-Nov. 2		5	
Karachi	Sept. 29-Oct. 5	1	1	
Madras	Oct. 5-26	12	8	
Indo-China:				
Anam	Aug. 1-31	29	8	
Cambodia	do	78	40	
Cochin-China	do	97	27	
Saigon	Oct. 7-20	13	3	
Tonkin	Aug. 1-31	5		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Jan. 17, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Japan:				
Kobe	Oct. 26-Dec. 7	70	14	
Java:				
East Java				Oct. 7-21, 1918: Cases, 6.
Surabaya	Oct. 7-21	3		
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 55.
West Java				Oct. 2-23, 1918: Cases, 313; deaths, 101.
Batavia	Oct. 2-23	73	58	
Mesopotamia:				
Bagdad	Oct. 11-18	11		
Mexico:				
Ciudad Juarez	Nov. 24-30	1		
Newfoundland:				
St. Johns	Dec. 6-20	4		
Outports—				
Blaine Harbor	Dec. 14-20	2		
Bay Roberts	Dec. 21-27	1		
Bryants Cove	Dec. 7-13	3		
Burin	do	4		
Colevs Point	Dec. 14-20	1		
Musgrave Harbor	Dec. 7-13	4		
Paradise	do	60		Placentia Bay.
Philippine Islands:				
Manila	Nov. 2-9	2	2	
Portugal:				
Lisbon	Nov. 16-23	255		
Spain:				
Cadiz	Oct. 1-31		3	
Madrid	Sept. 1-Oct. 31		153	
Valencia	Nov. 10-16	6	2	
Straits Settlements:				
Penang	Oct. 6-12	1		
Union of South Africa:				
Cape of Good Hope State—				
Cape Town	Aug. 1-30	1		

TYPHUS FEVER.

Brazil:				
Ceara	Sept. 14-21	1		
Colombia:				
Barranquilla	Nov. 8-Dec. 7		2	
Egypt:				
Alexandria	Oct. 14-Nov. 25	63	39	
Greece:				
Saloniki	Sept. 29-Oct. 19		19	
Japan:				
Nagasaki	Nov. 10-24	2	1	
Java:				
East Java				Oct. 7-21, 1918: Cases, 5.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 8.
West Java				Oct. 2-23: Cases, 31; deaths, 6.
Batavia	Oct. 2-23	15	4	
Siberia:				
Vladivostok	Sept. 1-Nov. 30	16		
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

Ecuador:				
Babahoyo	Nov. 1-30	1		
Duran	Nov. 1-15	1	1	
Guayaquil	Nov. 1-30	77	42	
Milagro	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		

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general decrease in the number of cases of influenza reported.
(See p. 198.)

A Comparison of the Mortality Rates by Weeks During the Influenza Epidemic of 1889–90 and During the Primary Stage of the Influenza Epidemic of 1918 in 12 Cities in the United States.

A partial comparison of the influenza epidemic of 1889–90 with the present epidemic with respect to mortality may be made from statistics of the former epidemic in certain cities as given in a treatise by Dr. Samuel W. Abbott, late secretary of the Massachusetts State Board of Health,[1] and from preliminary statistics for the same cities as published by the Bureau of the Census in its Weekly Health Index.

In the paper cited above, Dr. Abbott gives statistics of deaths from all causes and from "respiratory diseases." The Bureau of the Census' Weekly Health Index gives deaths from all causes and from influenza and pneumonia (all forms). Since deaths from respiratory diseases are not directly comparable with deaths from influenza and pneumonia, comparison of the mortality during the two epidemics must be based on deaths from all causes. It appears, moreover, from comparing mortality from all causes with mortality

[1] Abbott, Samuel W., M. D., secretary of the Board (of Health of Massachusetts): The Influenza Epidemic of 1889–90. Twenty-first Annual Report of the State Board of Health of Massachusetts (Public Doc. No. 34), 1890, pp. 307-384.

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from respiratory diseases during the 1889–90 epidemic, that the mortality from all causes affords a very true picture of the mortality rates as affected by the epidemic. The same may be said of mortality from all causes during the primary stage of the epidemic of 1918 when it is compared with mortality from influenza and pneumonia. The annual mortality rate by weeks from all causes has been employed, therefore, as the basis for the comparison that is presented here.

It will doubtless be realized that the rates for the two epidemic periods are not as comparable as might be desired. The statistics for 1889–90 are probably less complete than those for 1918, for the reason that the reporting and recording of deaths is more accurately and completely done now than 30 years ago. The base line for the epidemic of 1889–90 is higher than that of 1918 because of a higher normal or usual death rate, and, unfortunately, sufficient data are not immediately available for correcting this difference statistically. The statistics of the 1918 epidemic are not strictly comparable with those of the 1889–90 epidemic for the reason that only the primary stage or wave of the 1918 epidemic is represented and mortality during the recrudescences that have occurred, and that may occur, is not brought into consideration. For these and probably other reasons, the statistics can not be utilized with any great degree of refinement and are useful in affording only a very general comparison of the two epidemics.

In Tables I and II are shown the annual mortality rate from all causes by weeks for the periods December 15, 1889–February 15, 1890, and September 8–November 30, 1918. In Table III the same figures are presented, but according to a different arrangement: In order to compare the course of the two epidemics, the "peak" weeks (or weeks in which the highest mortality occurred) in the two epidemics are placed together. It was found that this method afforded a fairly clear basis for comparison except in two instances—San Francisco and Fall River—where the curves were fitted together instead. In figure 1 the mortality rates as arranged in Table III have been plotted for each of the 12 cities and for the 12 cities as a single population group, the same scale being used for all of the graphs.

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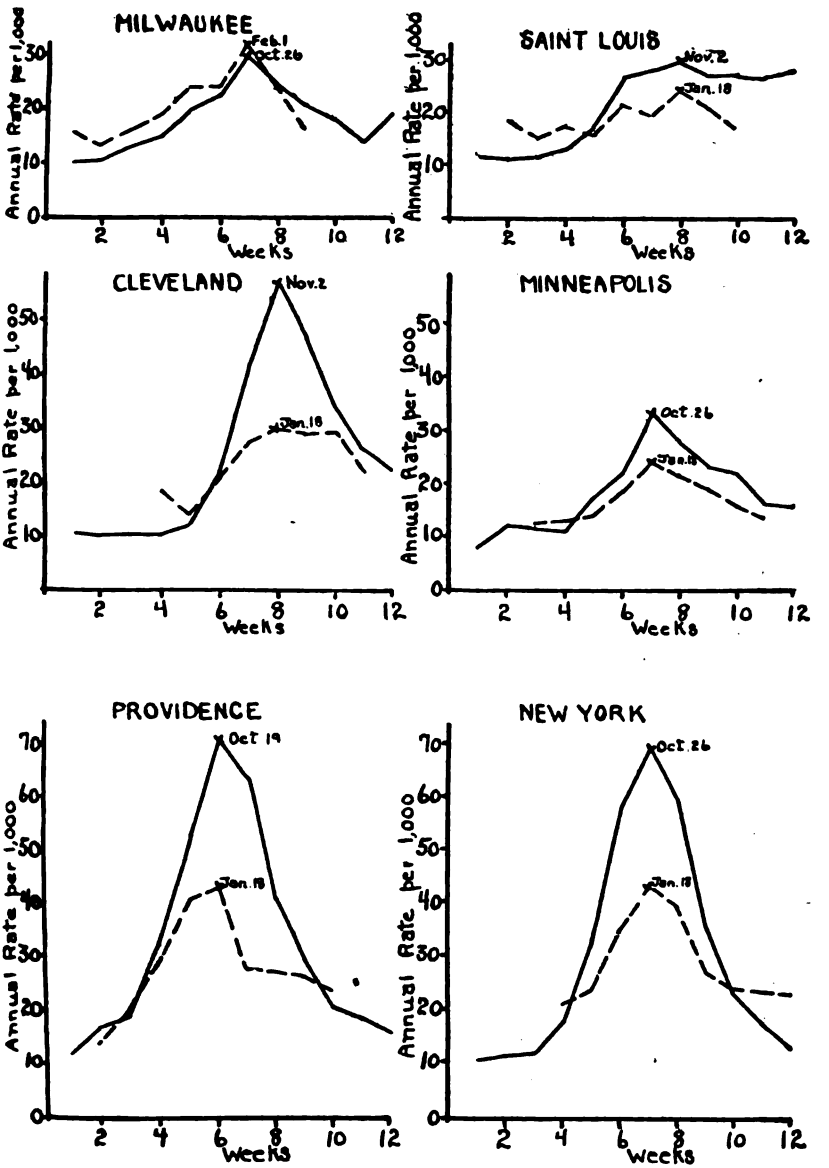

Influenza epidemics 1889-90 (broken line) and 1918 (continuous line). Annual death rate per 1,000 population from all causes, by weeks.

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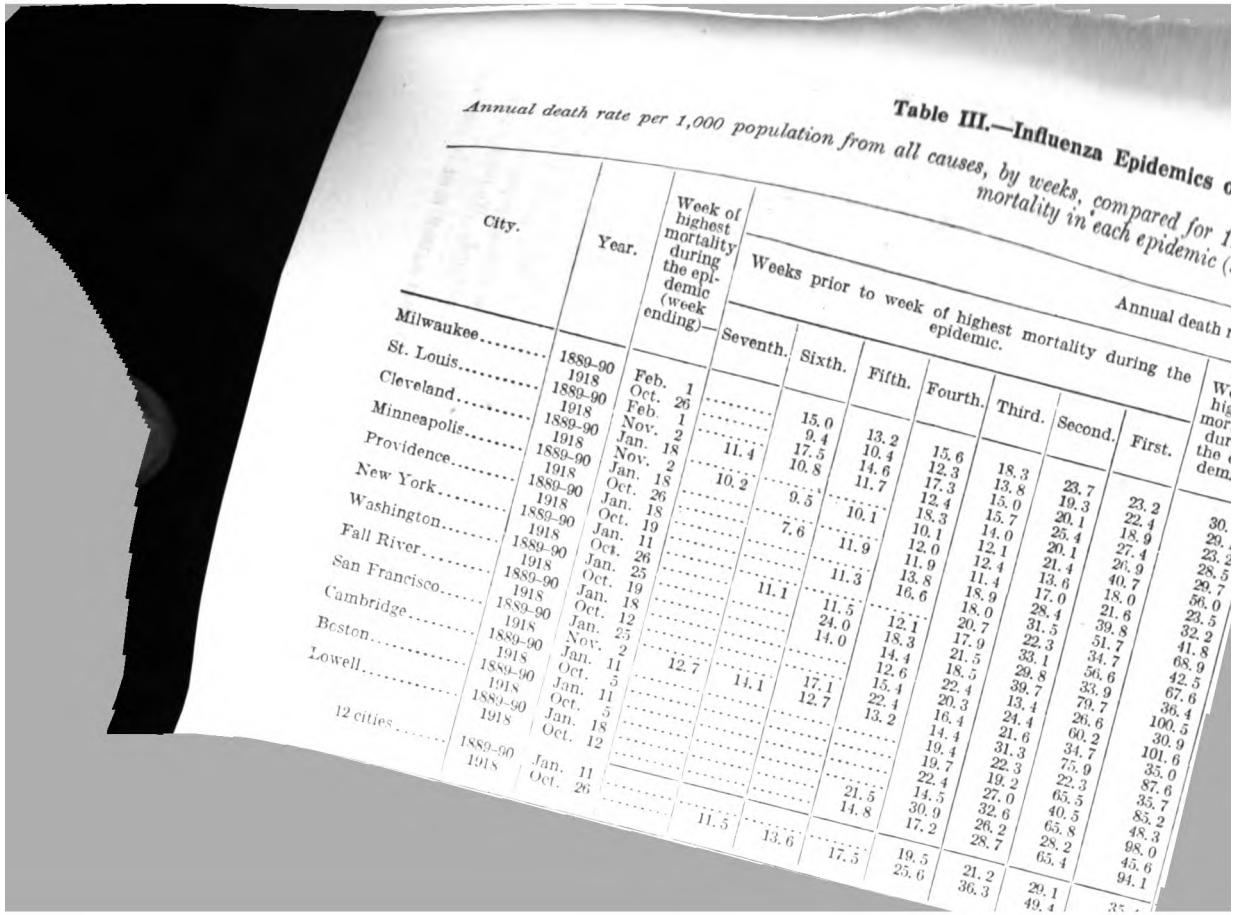

Table III.—Influenza Epidemics o

Annual death rate per 1,000 population from all causes, by weeks, compared for 1 mortality in each epidemic (

City.	Year.	Week of highest mortality during the epidemic (week ending)—	Weeks prior to week of highest mortality during the epidemic.							Wi hig mor dur the dem
			Seventh.	Sixth.	Fifth.	Fourth.	Third.	Second.	First.	
Milwaukee	1889–90	Feb. 1		15.0	13.2	15.6	18.3	23.7	23.2	30.
	1918	Oct. 26		9.4	10.4	12.3	13.8	19.3	22.4	29.
St. Louis	1889–90	Feb. 1		17.5	14.6	17.3	15.0	20.1	18.9	23.
	1918	Nov. 2	11.4	10.8	11.7	12.4	15.7	25.4	27.4	28.
Cleveland	1889–90	Jan. 18				18.3	14.0	20.1	26.9	29.
	1918	Nov. 2	10.2	9.5	10.1	10.1	12.1	21.4	40.7	56.
Minneapolis	1889–90	Jan. 18				12.0	12.4	13.6	18.0	23.
	1918	Oct. 26		7.6	11.9	11.9	11.4	17.0	21.6	32.
Providence	1889–90	Jan. 18				13.8	18.9	28.4	39.8	41.
	1918	Oct. 19			11.3	16.6	18.0	31.5	51.7	68.
New York	1889–90	Jan. 11		11.1			20.7	22.3	34.7	42.
	1918	Oct. 26			11.5	12.1	17.9	33.1	56.6	67.
Washington	1889–90	Jan. 25			24.0	18.3	21.5	29.8	33.9	36.
	1918	Oct. 19			14.0	14.4	18.5	39.7	79.7	100.
Fall River	1889–90	Jan. 18				12.6	22.4	13.4	26.6	30.
	1918	Oct. 12			17.1	15.4	20.3	24.4	60.2	101.
San Francisco	1889–90	Jan. 25			12.7	22.4	16.4	21.6	34.7	35.
	1918	Nov. 2				13.2	14.4	31.3	75.9	87.
Cambridge	1889–90	Jan. 11					19.4	22.3	22.3	35.
	1918	Oct. 5					19.7	19.2	65.5	85.
Boston	1889–90	Jan. 11					22.4	27.0	40.5	48.
	1918	Oct. 5					14.5	32.6	65.8	98.
Lowell	1889–90	Jan. 18					30.9	26.2	28.2	45.
	1918	Oct. 12			21.5		17.2	28.7	65.4	94.
12 cities	1889–90	Jan. 11				19.5		21.2	29.1	
	1918	Oct. 26	11.5	13.6	17.5	25.6		36.3	49.4	

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Such a method would require a separate ditch for each spot from which water is issuing, and would mean, in many cases, a series of ditches about 12 inches apart along the whole hillside. The only effectual way of collecting the water in such places is by means of ditches dug *at right angles to the flow of the seepage water*, or, in other words, across the exposed end of the water table. Such ditches

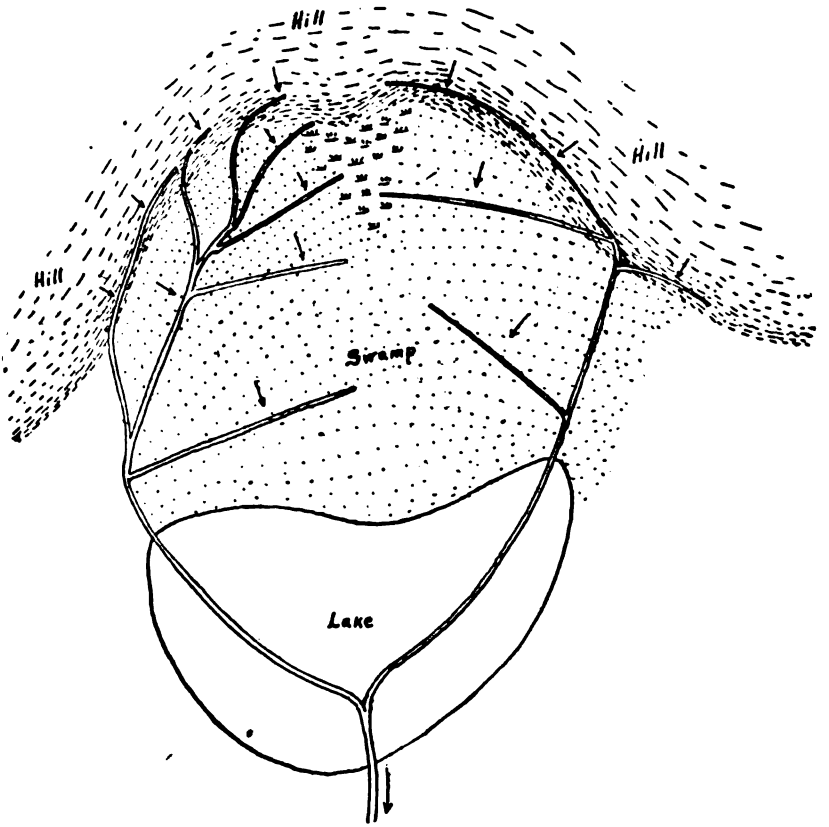

FIG. 2. - Seepage outcrop ditches.

may then be connected to one or more main ditches, if necessary, and the water carried down the hillside parallel to the seepage flow. These points are illustrated roughly in the accompanying sketches of actual swamps.

In No. 1 there was seepage on both sides of a narrow valley, the water coming out of two hills opposite one another, as shown by the arrows. As a result the bottom of the valley in this region was a typical cat-tail swamp with water from 1 inch to 2 feet in depth. Since the source was somewhat up on the hillside, it was useless to dig a ditch through the bottom of the swamp and down the valley. This would simply carry off the deep water and leave the seepy marsh as it was. Instead a deep, narrow ditch was dug along the

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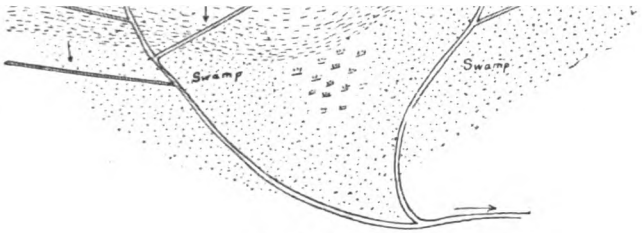

FIG. 3.—Seepage outcrop ditches.

table this time was too deep to be intercepted entirely by one ditch and it was necessary to dig additional intercepting laterals at intervals lower down. On one side five such ditches, more or less parallel to one another and at right angles to the seepage flow, were required to catch all of the water before it came to the surface.

In case No. 3 an outcrop on a relatively steep hillside is represented. Here it was necessary to dig several intercepting laterals parallel to one another and only a few feet apart in order to catch all of the flow. When this was done over the area in which the seepage water was actually coming out of the ground, the remainder of the swamp lower down the hillside became completely dry.

In each of these cases collection of the water depended upon the ditches being constructed primarily as intercepting rather than conducting ditches. In the case of swamp No. 1 the ditches happen to be intercepting and conducting at the same time; but more often

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separate conducting ditches must be constructed to carry off the water after it has collected in the intercepting ditches.

With the exception of a few features like these most of the drainage work is largely a matter of running levels and managing labor. Common sense and practice are the main requisites. Here, as in the rest of the work, the habits of the mosquitoes must be kept in mind. For instance, a swiftly running ditch is better than a sluggish one; water confined in a narrow channel will run more swiftly, give less surface and be easier to oil; hence V-shaped ditches are usually preferable to wide-bottomed ones. If the ditch is large and the sides are apt to cave, they should be sloped. Sandy soil caves easily and requires relatively wide ditches. A large ditch, primarily to carry

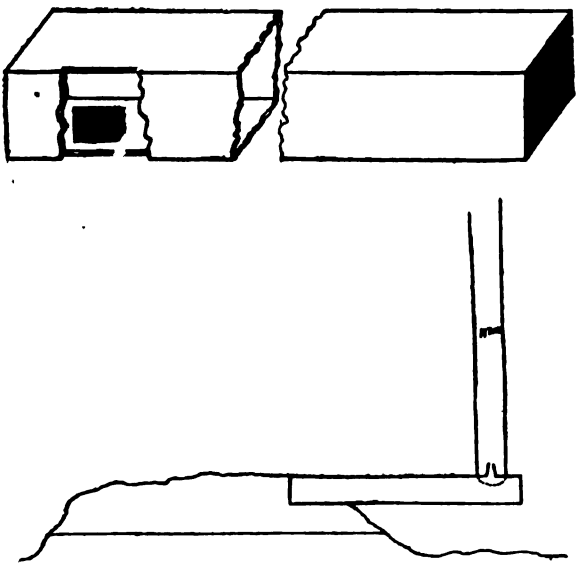

FIG. 4.—Improvised drain head.

flood waters, is apt to transform into a series of shallow puddles in the dry season. An efficient remedy for this is a small V-shaped ditch about the width of a shovel down the middle of the large ditch. It will often eliminate all of the little puddles.

Vertical drainage.—By vertical drainage is meant drainage by means of wells sunk vertically; the purpose being to conduct the water down through relatively impervious soil into water-bearing sand or gravel. Such drainage is usually advisable only where surface drainage is very difficult or expensive. No thoroughly tested and standardized method has yet been worked out for this form of drainage, but several types of drains have been used with fair success. Holes are bored near the margin of the water to be drained, and are

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sunk down into an underlying water-bearing stratum. The number and size of these holes depends upon the amount of water to be drained, the rapidity with which it must be carried off and the nature of the underlying stratum. If the stratum is near the surface large, open wells may be dug or blasted out and the water carried off rapidly. If it is deep down, holes should be bored with a boring outfit and drain heads installed. Fabricated drain heads may be purchased or improvised drain heads may be made on the spot. One type used by the writer, and found to give satisfaction up to the present time, is made as follows:

An elongated, narrow, culvertlike box is constructed out of rough lumber. One end is closed tightly, and in the bottom near this end a small hole, 2 to 4 inches in diameter, is cut to come directly over the well. The hole should be only one-fourth to one-third the diameter of the well in order that the water may fall into the well without washing the sides. This box is to be laid as a pipe connecting the well with the pond and the bottom of the box should be just level with the bottom of the pond, otherwise the water will fail to flow in, or will flow too rapidly and will wash in a large amount of sediment. At best some sediment will be carried, and to reduce this to a minimum a fine screen, covered with a coarse screen is placed over the end of the box and over the hole leading into the well.

An improvement might be added to this drain head in the shape of a pipe or funnel-shaped conductor suspended vertically into the well from the hole in the box. This would tend to reduce the washing and consequent crumbling of the sides of the hole.

In practice this type of well has been used in clay soil without any lining, but in a softer soil the hole would probably require casing with tile or iron pipe to prevent its caving in.

Oiling.

Next to drainage and as an adjunct to it, oiling is the main reliance in mosquito control. The general principles of this process are well known, but a few features may bear repetition or emphasis in this connection. Since *Anopheles* seldom develop in less than 8 to 15 days, even in warm weather, it is customary to apply oil about once a week. No definite formula can be given for the oil to be used. Straight kerosene is very effective, for it spreads rapidly and will make a very thin film. But it also evaporates rapidly, and is difficult to see on the water, hence it is usually mixed with so-called crude oil [1] in parts varying from 3 : 1 to 1 : 3, depending upon the circumstances and upon the thickness of the crude oil. The most satisfactory mixture is one that is nearly black in color and slightly thicker than

[1] True crude oil is very difficult to obtain; what is usually used is fuel or black oil.

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kerosene in consistency. This spreads rapidly and is easily seen on the water. In this connection it should be emphasized that an exceedingly thin film is all that is necessary. This film may be seen by the sheen it gives to the water when viewed in the proper light—a characteristic easily noted after a little practice.

Oil may be applied in various ways. In ordinary work the spray can is the main reliance. The type generally used is some form of knapsack sprayer that can be easily carried and that has an adjustable nozzle. The nozzle should be adjusted to throw a very fine spray, otherwise much of the oil will remain in globules instead of spreading out in a film.

On small streams and ditches with a fairly good current drip cans are used to advantage. Most of those in use are constructed upon the same principle, but in details they are very diverse. A discussion of several types will be found in Le Prince and Orenstein's "Mosquito Control in Pamana." As a rule each worker introduces modifications to suit his own ideas or to suit the material available. A type of can used by the writer is constructed from an ordinary 5 or 10 gallon oil can having a spout near the top. The screw cap of this spout is perforated, and a nail, packed around the basal end with waste, is inserted in the hole.[1] The can is laid on its side with the spout down so that the oil drips out along the nail. By tightening or loosening the latter the flow can be regulated down to a few drops per minute.

Another type of can, reputed to be satisfactory, is composed of an ordinary oil can to which is attached an accurately ground petcock susceptible of accurate adjustment. It is probable, however, that this can exhibits the same tendency as others toward getting clogged up with sediment to such an extent that the flow is inhibited. All types of drip cans known to the writer require inspection every few hours to insure a regular flow.

As a substitute for drip cans oil-soaked waste or bags of oil-soaked sawdust are often used. These are fastened at or near the bottom of the ditch or stream at intervals varying with the size and rate of flow. Oil oozing out of the waste or sawdust comes to the surface, spreads out into a film, and floats down stream. As in the case of drip cans the amount of oil-soaked material necessary and the intervals between the stations depend upon the volume of water, etc., and must be determined for each place separately. A little practice will indicate the proper procedure. All that is necessary is that a continuous film be produced over the entire water surface, throughout the necessary distance, and for a period of at least 12 hours once a week.

[1] See p. 158 of Le Prince and Orenstein.

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Oil-soaked sawdust, in addition to its use as a substitute for drip cans, may be sprinkled over the water surface and thus prove useful as a substitute for other methods of oiling. Its efficiency in instituting rapid control over water areas which have not been cleared of brush or débris is apt to be particularly satisfactory. The value here lies in the fact that the sawdust will often spread the oil film over the surface in spite of the weeds, sticks, grass, or whatever else would have a tendency to break up the film.

Very recently a method of oiling has been proposed by Surg. M. J. White, of the United States Public Health Service, which, when used in conjunction with oil-soaked sawdust, is intended to supplant all other methods. This is described in a circular letter issued by the United States Public Health Service, from which the following extract is taken:

"This method lays down the oil by capillarity. The wick is a piece of jute binder twine. It is common in station waste. The pepper can, also found in station waste, has a push lid which protects the oil from rain and is easily removed for subsequent filling of the can. The wick, previously oiled, is brought out the side of the can through a hole near the top made by raising the flap of the tin which also serves to prevent rain from beating in at this hole. A wire loop passed through the side of the can at two opposite points immediately below its lid is tied to a stout strip of wood or stick driven in the middle of the ditch or side of the pool at a sufficient inclination to permit the can to hang free. The can should be hung above the flood-water level and the distal end of the wick allowed to hang free in water, about 2 inches of it being submerged. The proximal end of the wick is anchored within the can by an iron nut. The can is refilled every three or four days, at which time the laborer squeezes or washes out the silt that may have accumulated on the submerged portion of the wick. The flow of the oil varies principally with the length of the wick and velocity of the water. If there are no surface obstructions such as algæ or fallen grasses, this method will supply a continuous film of oil. Fuel oil is used. If such obstructions exist they must be raked away daily so that the oil may spread. This continuous application of a thin film of oil is practiced to prevent oviposition. For larvicidal purposes the film is collected at points along the ditch by obstructing the surface with strips of wood placed across the ditch. These strips allow the water to pass beneath but arrest the surface oil. The larvæ swim away from the oiling focus and travel in the direction the oil travels. They will go upstream away from the wick if the wind bears the oil in that direction. Having determined the direction the oil will travel the wooden strips are placed from 50 to 100 feet apart. If algæ are present and rapid

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work is desired a separate can is provided for each section. The oil accumulates at the wooden strips and as the larvæ, fleeing from the source of the oil, come in contact with this accumulated thick layer of oil, they receive lethal treatment. At first some of the larvæ will pass beneath the wooden strip from one section to another, but they soon succumb. In oiling a pool, cans are placed at selected points along the edges and the wind will drive the oil across. Constant oiling is thus maintained no matter the direction of the wind. A thin film of oil is larvicidal in the course of a day, and the pupæ appear to be less resistant than larvæ. Continuous oiling by capillarity is the method preferred for permanent ground pools and drainage ditches, while the sowing of oil-soaked sawdust is preferred for more or less temporary puddles, wagon tracks, hoofprints, postholes, and other small excavations. These two methods meet the requirements far better than the spray pumps and drip cans. Their use enables the laborers to devote most of their time to preventing obstructions, particularly algæ, that would interfere with the spread of the oil. They also effect substantial economy in the cost of labor, oil, and apparatus.

"The satisfactory use of oil-soaked sawdust is reported in the notes from the marine barracks at Quantico, Va., published in the Naval Sanitation Bulletin of June 14, 1918—Bulletin No. 29."

Accessory Measures.

1. *Fish control.*—Under suitable conditions fish control appears to be very effective, but it is a method that must be watched with care, for it is dependent upon the ability of the fish to obtain easy access to the larvæ, and anything that interferes with this will interfere with the control.

It goes without saying that it is also dependent upon the presence of the proper kind of fish. In the South these are usually members of the genus *Gambusia*, although other genera are said to be effective also. In case any doubts are entertained as to the best forms available for a given locality definite information may be secured from the Bureau of Fisheries.[1]

2. *Larvicides.*—At the present time larvicides are not being used to any great extent, except where they constitute the waste products of chemical factories. Probably the only one in anything like general use is niter cake, an acid by-product resembling slabs of marble in appearance. This is fairly efficient, but of limited usefulness. It is unsuited to running water or ponds that are frequently washed out by freshets. In old wells, abandoned cisterns, etc., it may be used to good advantage in case there is no danger of poisoning persons

[1] See also Radcliffe, 1915, in appended bibliography.

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The style of pump used in the preliminary tests is of the automatic type that retains compression so as to provide a constant mist spray. It is the sort used for spraying disinfectants. The only essential feature is that a very fine "atomized" spray be secured—a mist that will float in the air.

Such a mist will settle over the surface of the water, into hoof-prints, etc., and will float in among plants or other obstructions that may protrude above the surface, provided such obstructions do not form a complete canopy.

A remarkably small quantity of this material will kill *Anopheles* larvæ if properly applied. Apparently a film of creosote is not essential, as the lethal action is not brought about by suffocation so much as by poisoning, and the fine mist over the surface of the water suffices for this purpose.

For the treatment of small puddles, edges of streams, ponds, etc., and for handling a large territory where bodies of water are scattered and transportation is difficult this method holds considerable promise.

If the initial results stand the test of further trials on a larger scale and the method proves practicable for general use, it is believed that a substantial economy may be obtained in the lessened cost of labor, transportation, and material. The creosote costs from 20 to 30 cents per gallon in bulk, and it is estimated that 1 gallon will do the work of several gallons of oil.

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Since creosote is poisonous to fish and other animals, it must be used with caution on water containing fish and on water used by stock. If a pond or stream is more than a few feet wide, fish are not affected by treatment of the edges. In small ditches with good current fish do not seem to be affected unless a large amount of oil is applied, but in small puddles even a light application is very apt to kill them. Owing to the irritating qualities of creosote, it is improbable that stock will drink water containing enough to do harm, but its use is not recommended in such cases except after careful trial.

The irritating effects of creosote are also felt by those who apply it if much is allowed to come in contact with the skin. For this reason, as well as to facilitate spreading the mist over the water, it is best, where possible, to apply it from the windward side.

In conclusion, a word may be said in regard to what might be called the social side of malaria control. The ultimate value of the present activities is going to be in direct proportion to the interest and appreciation that they evoke in the civilian communities. If the work stops with the termination of military activities, its value will have been merely ephemeral. But if, on the other hand, it proves to be the nucleus of an ever-increasing movement, its benefit to the country at large will be incalculable. Hence those conducting anti-malaria work in the field should miss no opportunity to make the work a public enterprise, understood by the public, upheld by public sentiment, and brought into the position of a permanent institution in the eyes of the public.

Useful Equipment and Supplies.

1. *Dynamite.*—With the present shortage of labor this is a valuable adjunct to ditching, either for the purpose of removing stumps from ditch lines or for digging the entire ditch. For the latter purpose the 50 or 60 per cent "straight nitroglycerine" dynamite should be used, for it only will explode by the "propagation method." Full details and demonstrations may be obtained from the leading dynamite manufacturers.

2. *Ditching machines.*—The horse and mule drawn ditching machines have been found very satisfactory for constructing ditches of less than 3-foot depth in open land. They make ideal V-shaped ditches, and in suitable localities may be operated very cheaply. In cleaning out roadside ditches they are particularly effective.

3. *The phosphate drag.*—This tool, somewhat resembling a potato fork, but much more substantial, is invaluable for cleaning out ditches or for working in marshy land that is full of roots, etc. It is so strong that it will last indefinitely even with the hardest usage, and its construction makes it superior to shovels or rakes for work

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in soft ground. If not available locally, it may be obtained from wholesale hardware firms.

More specific information regarding the equipment mentioned above, the particular types found most useful, where they may be purchased, etc., may be obtained by addressing the United States Public Health Service, Washington, D. C.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED JAN. 25.

CAMP BEAUREGARD ZONE, LA.

	Cases.
Alexandria:	
Chicken pox	1
Gonorrhea	1
Influenza	129
Measles	2
Meningitis	1
Mumps	1
Malaria	4
Pneumonia	1
Pineville:	
Influenza	11
Rural district:	
Influenza	7
Tioga:	
Influenza	1

CAMP BOWIE ZONE, TEX.

Fort Worth:	
Chicken pox	2
Diphtheria	1
Gonorrhea	10
Influenza	6
Meningitis	1
Pneumonia	13
Poliomyelitis	1
Scabies	6
Scarlet fever	1
Smallpox	1
Syphilis	1
Trachoma	2
Tuberculosis	3
Typhoid fever	1

BREMERTON ZONE, WASH.

Influenza	129
Pneumonia	5

CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	
Influenza	449
Syphilis	1
Tuberculosis	2
Typhoid fever	1

[1] From Dec. 20, 1918, to Jan. 24, 1919.

CAMP DEVENS ZONE, MASS.

	Cases.
Influenza:	
Ayer	1
Lancaster	1
Shirley	5
Tuberculosis, pulmonary:	
Ayer	2
Whooping cough:	
Lancaster	3

CAMP DIX ZONE, N. J.

Diphtheria:	
New Hanover Township	1
Tuberculosis:	
Pemberton Township	2

CAMP DONIPHAN ZONE, OKLA.

Lawton:	
Gonorrhea	2
Syphilis	1

CAMP EBERTS ZONE, ARK.

Chicken pox:	
Lonoke, R. F. D	1
Influenza:	
Austin	4
Austin, R. F. D	8
Cabot	4
Cabot, R. F. D	5
Carlisle	6
England	18
England, R. F. D	115
Keo	15
Lonoke	96
Lonoke, R. F. D	127
Ward	10
Malaria:	
Cabot	3
Kerr	1
Measles:	
England, R. F. D	11

[2] From Dec. 12, 1918, to Jan. 23, 1919.

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CAMP KEARNS ZONE, ARK.—continued.

Pneumonia:	Cases.
England	2
Lonoke, R. F. D	3
Syphilis:	
Lonoke	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chicken pox	2
Influenza	195
Mumps	3
Pneumonia	24
Syphilis	1

CAMP FUNSTON ZONE, KANS.

Cleburne:	
Influenza	2
Junction City:	
Gonorrhea	2
Pneumonia	1
Scarlet fever	2
Manhattan:	
Diphtheria	1
Influenza	35
Measles	2
Mumps	4
Pneumonia	5

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Chicken pox:	
Columbus	1
Influenza:	
Bibb City	1
Columbus	67
Girard	18
Muscogee County	39
Phoenix City	38
Meningitis:	
Bibb City	1
Pneumonia:	
Columbus	4
Girard	1
Scarlet fever:	
Muscogee County	1
Smallpox:	
Columbus	1
Girard	1
Tuberculosis:	
Columbus	1
Muscogee County	1
Phoenix City	1

GERSTNER FIELD ZONE, LA.

Influenza	40
Pneumonia	1
Smallpox	35

CAMP GREENE ZONE, N. C.

Charlotte Township:	
Gonorrhea	8
Influenza	35
Syphilis	5
Tuberculosis	1

GULFPORT HEALTH DISTRICT, MISS.

Chicken pox:	Cases.
Pascagoula	1
Diphtheria:	
Biloxi	1
Dysentery:	
Gulfport	1
Gonorrhea:	
Gulfport	2
Pascagoula	1
Hookworm:	
Pascagoula	1
Influenza:	
Bay St. Louis	3
Biloxi	50
Gulfport	115
Handsboro	7
Kiln	2
Logtown	8
Long Beach	37
Lyman	2
Mississippi City	19
Moss Point	80
Ocean Springs	7
Pascagoula	15
Pass Christian	41
Scattered	3
Malaria:	
Gulfport	1
Logtown	3
Moss Point	4
Pascagoula	1
Measles:	
Gulfport	1
Mumps:	
De Lisle	3
Mississippi City	1
Moss Point	1
Pneumonia:	
Biloxi	4
Gulfport	5
Handsboro	2
Kiln	3
Logtown	1
Long Beach	1
Mississippi City	3
Moss Point	13
Pass Christian	6
Scattered	1
Scarlet fever:	
Gulfport	2
Syphilis:	
Kiln	1
Tuberculosis:	
Gulfport	1
Logtown	1
Whooping cough:	
Logtown	3

CAMP HANCOCK ZONE, GA.

Augusta:	
Diphtheria	1
Influenza	287
Smallpox	1

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CAMP HUMPHREYS ZONE, VA.

	Cases.
Chicken pox:	
Alexandria	1
Alexandria County	2
Fredericksburg	3
Influenza:	
Alexandria	96
Alexandria County	5
Fairfax County	17
Fredericksburg	50
Measles:	
Fairfax County	1
Mumps:	
Fredericksburg	2
Pneumonia:	
Fairfax County	2
Syphilis:	
Alexandria	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Influenza	726
Measles	6
Pneumonia	1
Tuberculosis	1
U. S. Government Clinic:	
Gonorrhea	3
Syphilis	6

CAMP JOSEPH E. JOHNSTON ZONE, FLA.

Jacksonville:	
Chancroid	3
Chicken pox	1
Chicken-pox carrier	1
Erysipelas	1
Gonorrhea	19
Influenza	143
Measles	31
Mumps	3
Pneumonia	2
Scarlet fever	1
Syphilis	16
Trachoma	1
Tuberculosis	5
Typhoid fever	1

FORT LEAVENWORTH ZONE, KANS.

Leavenworth:	
Diphtheria	2
Influenza	11
Leavenworth County:	
Diphtheria	4
Influenza	17
Mumps	1
Pneumonia	1

CAMP LEE ZONE, VA.

Ettricks:	
Influenza	1
Petersburg:	
Gonorrhea	3
Influenza	24
Measles	3
Pneumonia	1
Syphilis	2
Typhoid fever	1
Prince George County:	
Influenza	2

CAMP LEWIS ZONE, WASH.

	Cases
Influenza:	
Custer	1
Lakeview	4

CAMP M'ARTHUR ZONE, TEX.

Waco:	
Diphtheria	1
Influenza	7
Pneumonia	9
Scarlet fever	1
Tuberculosis	1

CAMP M'CLELLAN ZONE, ALA.

Anniston:	
Gonorrhea	4
Influenza	15
Mumps	1
Smallpox	2
Syphilis	3
Tuberculosis	1
Precinct 15:	
Pneumonia	1

CAMP MERRITT ZONE, N. J.

Diphtheria:	
Englewood	1
Influenza:	
Bergenfield	6
Closter	1
Dumont	4
Englewood	74
Haworth	1
Tenafly	6
Measles:	
Englewood	1
Pneumonia:	
Bergenfield	6
Englewood	7
Scarlet fever:	
Englewood	4
Tuberculosis:	
Englewood	1
Tenafly	1

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Florence:	
Measles	10
Muscle Shoals:	
Chancroid	21
Diphtheria	1
Gonorrhea	20
Influenza	78
Malaria	1
Measles	1
Mumps	16
Pneumonia	6
Scabies	3
Smallpox	2
Syphilis	8
Sheffield and Tuscumbia:	
Influenza	3
Measles	5
Pneumonia	2
Typhoid fever	1

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FORT OGLETHORPE ZONE, GA. AND TENN.

Diphtheria:	Cases.
Chattanooga	1
Gonorrhea:	
Altonpark	1
Chattanooga	13
Influenza:	
Chattanooga	13
Eastlake	2
North Chattanooga	10
Rossville	5
Pneumonia:	
Eastlake	1
Scarlet fever:	
Chattanooga	1
Syphilis:	
Chattanooga	9

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	5
Influenza	33
Measles	11
Pneumonia	3
Smallpox	2
Syphilis	7

CAMP PIKE ZONE, ARK.

Chicken pox:	
Little Rock	15
German measles:	
Little Rock	1
Gonorrhea:	
Little Rock	7
Influenza:	
Halsted	4
Jacksonville	19
Levy	6
Little Rock	442
North Little Rock	48
Picron	7
Measles:	
Little Rock	2
North Little Rock	2
Meningitis:	
Little Rock	1
Mumps:	
Little Rock	6
Pneumonia:	
Levy	1
Little Rock	45
North Little Rock	5
Scarlet fever:	
Little Rock	6
North Little Rock	1
Syphilis:	
Little Rock	3
North Little Rock	2
Trachoma:	
Little Rock	1

CAMP POLK ZONE, N. C.

Influenza:	
Durham	80
Durham County	20
Raleigh	400

CAMP POLK ZONE, N. C.—continued.

Measles:	Cases.
Durham County	1
Wake County	4
Mumps:	
Raleigh	1
Smallpox:	
Durham County	1
Typhoid fever:	
Durham	2
Wake County	1

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Gonorrhea:	
Portsmouth	2
Influenza:	
Norfolk	14
Norfolk County	76
Portsmouth	70
Measles:	
Norfolk	1
Portsmouth	1
Mumps:	
Norfolk	1
Norfolk County	1
Syphilis:	
Portsmouth	1
Tuberculosis:	
Portsmouth	3

PORTSMOUTH-KITTERY SANITARY DISTRICT, N. H. AND ME.

Influenza:	
Eliot	9
Kittery	7
Portsmouth	17
York	10
Scarlet fever:	
Portsmouth	1
Whooping cough:	
York	1

CAMP SEVIER ZONE, S. C.

Greenville:	
Chicken pox	3
Scarlet fever	1
Whooping cough	1
Greenville and vicinity:	
Influenza	431
Pneumonia	15
Paris Mountain Township:	
Measles	6

CAMP SHERIDAN ZONE, ALA.

Montgomery:	
Influenza	17
Pneumonia	5
United States Government Clinic:	
Chancroid	3
Gonorrhea	10
Syphilis	5

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CAMP SHERMAN ZONE, OHIO.

	Cases.
Chillicothe:	
Influenza	19
Measles	1
Pneumonia, broncho	2
Scarlet fever	5
Ross County:	
Influenza	7
Union Township:	
Measles	1
United States Government Clinic:	
Gonorrhea	3
Syphilis	2

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Chancroid:	
U. S. Government clinic	2
Diphtheria:	
Louisville	14
Gonorrhea:	
U. S. Government clinic	22
Venereal clinic, county jail	17
Influenza:	
Clark County	11
Jefferson County	94
Louisville	83
Pneumonia:	
Louisville	5
Scarlet fever:	
Jefferson County	1
Louisville	1
Smallpox:	
Louisville	1
Syphilis:	
U. S. Government clinic	24
Venereal clinic, county jail	10
Tuberculosis, pulmonary:	
Louisville	10

TIDEWATER HEALTH DISTRICT, VA.

Hampton:	
Scarlet fever	1
Newport News:	
Chicken pox	1
Erysipelas	1
Gonorrhea	15
Influenza	23
Measles	3
Pneumonia	1
Smallpox	1
Syphilis	3
Phoebus:	
Measles	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Gonorrhea	9
Influenza	133
Malaria	1
Measles	1
Mumps	2
Pneumonia	18
Syphilis	5
Tuberculosis	4
Typhoid fever	1

CAMP UPTON ZONE, N. Y.

	Cases.
Pneumonia:	
Brook Haven	1
Riverhead	1

VANCOUVER ZONE, WASH.

Diphtheria	1
Influenza	11
Mumps	1
Tuberculosis, pulmonary	1

CAMP WADSWORTH ZONE, S. C.

Chicken pox:	
Arkwright	1
Gonorrhea:	
Spartanburg	3
Influenza:	
Arcadia	3
Beaumont Mills	10
Converse	1
Fairforest	2
Saxon Mills	1
Spartanburg	15
Measles:	
Drayton	1
Spartanburg	3
Meningitis:	
Fairforest	1
Pneumonia:	
Fairforest	2
Spartanburg	1
Smallpox:	
Fairforest	1

CAMP WHEELER ZONE, GA.

Bibb County:	
Influenza	4
East Macon:	
Influenza	5
Macon:	
Chicken pox	6
Influenza	42
Measles	2
Pneumonia	6
Smallpox	1
Whooping cough	3

WILMINGTON SANITARY DISTRICT, N. C.

Chicken pox:	
Wilmington	3
Diphtheria:	
East Wilmington	1
Influenza:	
Cape Fear Township, rural	2
East Wilmington	2
Mason Boro Township, rural	1
Oleander	6
Sea Gate	2
Wilmington	38
Measles:	
Wilmington	1
Pneumonia:	
East Wilmington	1
Wilmington	16
Tuberculosis:	
Wilmington	1
Typhoid fever:	
Wilmington	2

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DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.[1]

Six Months Ended December 27, 1918.

The following data were compiled in the office of the Surgeon General, United States Army, from weekly telegraphic reports:

Annual admission rate per 1,000 (disease only):	
All troops	1,477.12
Divisional camps	1,593.91
Cantonments	1,651.59
Departmental and other troops	1,199.52
Average noneffective rate per 1,000 on days of reports:	
All troops	51.75
Divisional camps	62.93
Average noneffective rate per 1,000 on days of reports—Continued.	
Cantonments	56.25
Departmental and other troops	41.62
Annual death rate per 1,000 (disease only):	
All troops	32.15
Divisional camps	29.90
Cantonments	36.69
Departmental and other troops	27.82

Annual admission rate for special diseases reported during 6 months ended Dec. 27, 1918.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual death rate (disease only).	Annual admission rate per 1,000 (disease only).	Average noneffective per 1,000 on days of reports.
Beauregard	147.2	7.50	24.65	216.0	527.2	45.2	2.7	0.0	55.0	2,124.4	78.2
Bowie	170.5	2.16	5.84	803.2	960.5	3.8	0.6	0.2	35.4	2,622.7	58.3
Cody	35.0	0.32	1.13	110.8	487.1	21.8	0.3	8.1	40.6	983.4	46.6
Ferrest	68.0	0.0	0.0	136.0	549.9	34.0	0.0	0.0	39.3	2,046.8	51.5
Fremont	52.3	0.98	0.61	49.3	25.5	29.2	0.3	0.0	20.4	897.7	44.2
Greene	125.7	0.33	0.13	321.2	792.7	10.4	2.8	0.1	48.8	1,676.2	58.2
Greenleaf	19.5	1.02	2.96	52.9	608.8	34.7	1.1	1.0	32.3	1,293.0	50.1
Hancock	95.5	0.0	2.84	129.3	466.4	27.7	0.6	25.1	37.2	1,540.0	59.3
Kearny	83.2	0.0	1.93	102.2	464.3	12.9	0.5	0.7	18.0	1,073.0	38.5
Logan	117.4	0.0	15.26	178.8	652.3	11.7	1.3	0.1	21.5	2,133.0	62.1
MacArthur	48.7	0.56	2.53	158.8	780.0	47.0	0.4	0.4	19.8	1,756.3	66.3
McClellan	131.0	0.0	4.82	91.6	448.3	45.9	1.7	0.2	29.5	1,708.4	66.5
Sevier	119.8	0.0	13.6	70.9	431.9	43.8	3.3	0.8	38.5	1,454.5	56.1
Shelby	45.3	2.74	21.3	106.7	254.1	52.6	0.5	0.3	9.4	1,667.6	60.8
Sheridan	66.7	0.0	2.64	222.9	477.7	52.4	0.3	0.3	19.6	1,881.7	56.1
Wadsworth	84.7	0.0	2.7	570.3	65.1	14.8	0.5	0.5	22.2	1,683.5	57.5
Wheeler	104.8	0.23	8.17	89.9	9.3	1.9	0.8	0.0	23.0	1,243.0	40.7
Custer	150.4	0.18	0.0	194.5	516.4	5.3	0.5	1.3	42.2	1,381.6	34.0
Devens	171.9	0.05	0.85	75.6	760.3	24.7	1.8	0.6	46.2	1,715.6	57.5
Dix	117.0	0.57	2.48	546.2	291.0	8.7	1.1	0.9	41.8	1,605.5	46.0
Dodge	67.2	0.06	0.63	250.0	645.5	53.0	0.6	1.8	50.5	1,993.2	90.3
Eustis	40.8	0.9	11.1	118.7	697.7	18.5	0.2	0.9	33.1	1,454.9	36.3
Funston	102.6	0.0	0.6	140.5	602.8	45.7	1.0	4.5	43.5	1,400.5	46.6
Gordon	64.6	0.0	8.04	191.9	518.3	53.5	1.2	0.1	15.9	2,282.1	75.7
Grant	147.1	0.0	1.14	44.7	514.5	7.8	0.2	1.9	59.0	1,029.6	29.2
Humphreys	169.3	0.87	1.96	62.9	744.7	23.8	1.5	0.0	57.6	1,469.8	45.1
Jackson	67.2	0.15	2.74	299.9	406.2	40.0	2.8	0.3	23.5	1,391.9	57.1
Johnston	51.9	0.0	9.75	137.4	207.9	37.4	0.9	0.2	17.1	1,180.7	38.5
Las Casas	87.8	0.0	24.37	49.7	349.5	83.1	0.0	0.0	17.5	2,004.8	53.4
Lee	75.6	0.5	0.5	82.5	549.5	28.5	0.8	0.1	31.2	1,352.6	60.1
Lewis	128.1	0.06	1.15	176.5	194.9	23.9	0.9	2.3	12.8	1,733.7	59.7
Meade	150.7	0.34	2.03	189.2	486.4	23.9	1.5	0.4	42.3	1,302.3	38.6
Pike	50.6	0.0	12.73	438.7	638.3	85.6	2.0	0.5	25.7	3,300.7	72.9
Sherman	178.1	0.0	0.83	103.1	330.2	30.0	0.9	0.7	68.6	1,588.0	60.7
Taylor	120.6	0.0	0.0	61.7	417.9	55.3	3.1	2.5	39.9	1,678.6	61.5
Travis	184.5	2.51	5.54	109.3	500.7	5.9	0.7	0.2	18.6	2,756.4	85.1
Upton	96.8	0.12	0.45	270.8	647.1	11.4	0.3	0.3	28.4	1,455.3	53.2
Northeastern Department	23.1	0.0	0.87	72.9	283.3	4.1	0.8	0.2	25.7	1,199.1	37.2
Eastern	32.1	0.3	1.29	74.0	345.6	6.9	0.3	0.2	18.2	976.5	29.3
Southeastern	81.4	1.32	13.4	141.5	841.7	23.1	0.3	0.3	27.1	2,065.8	58.4
Central	82.9	0.43	0.75	58.6	609.0	6.2	0.3	3.5	30.8	1,746.4	46.9
Southern	54.2	1.71	3.23	69.4	422.5	3.0	0.3	0.6	20.2	1,340.4	45.0
Western	51.3	0.75	0.30	58.2	325.4	9.4	1.2	1.1	25.5	999.8	32.4
Aeronautics	46.8	0.33	3.26	53.1	355.0	4.1	0.2	1.2	17.7	1,217.5	43.7

[1] Including Porto Rico.

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Annual death rate per 1,000 (disease only), by causes, for the six months ended Dec. 27, 1918.

Pneumonia	28.558	Scarlet fever	0.694
Influenza	1.513	Typhoid fever	.651
Meningitis	.422	Dysentery	.[illegible]
Empyema	.149	Other diseases	.[illegible]
Tuberculosis	.383	Total	[illegible]
Septicemia	.064		
Measles	.021		

Annual admission rate per 1,000 for special diseases, six months ended Dec. 27, 1918.

Disease.	All troops in United States, 1917.	All troops in United States.	Departmental and other troops.	Divisional camps.	Cantonments.
Pneumonia	15.18	85.18	48.89	87.51	113.46
Dysentery	.87	.63	.94	.88	.27
Malaria	7.46	3.75	2.93	6.43	1.67
Venereal	113.82	180.62	84.80	182.11	189.89
Paratyphoid	.02	.01	.01	.006	.02
Typhoid	.41	.28	.27	.39	.28
Measles	85.15	24.70	10.64	30.25	23.42
Meningitis	1.74	.97	.57	1.05	1.27
Scarlet fever	3.52	1.65	1.21	3.51	1.18
Influenza	57.72	452.02	385.01	449.47	567.37

Week Ended January 17, 1919.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended January 17, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes):		
All troops in United States	1,418.29	1,515.39
American Expeditionary Forces	873.70	867.39
Annual admission rate per 1,000 (disease only):		
All troops in United States	1,197.54	1,288.39
American Expeditionary Forces	719.22	723.65
Noneffective rate per 1,000 on day of report:		
All troops in United States	54.22	58.21
American Expeditionary Forces	56.85	60.98
Annual death rate per 1,000 (all causes):		
All troops in United States	16.73	14.49
American Expeditionary Forces	15.66	20.17
Annual death rate per 1,000 (disease only):		
All troops in United States	15.66	12.29
American Expeditionary Forces	7.62	7.76

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Cases of special diseases reported during the week ended Jan. 17, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
				Total.	New infections.						
Beauregard	7	....	5	24	.....		4	....	.....	1,882.17	50.69
Bowie	8	....	....	70	12	5	5	....	.....	2,124.39	72.20
Cody	....	....	....	1	.....	10	.....	....	2	593.95	58.95
Fremont	6	....	....	2	.....	3	.....	....	.....	1,862.20	132.34
Greene	4	....	....	25	.....	9	1	....	.....	810.04	53.09
Greenleaf	....	....	....	2	.....	.....	.....	....	.....	738.69	45.20
Hancock	77	....	1	41	7	95	1	....	2	1,694.72	86.80
Kearny	14	....	....	24	8	45	.....	....	.....	1,190.40	28.10
Logan	9	....	1	16	.....	34	8	....	.....	818.24	47.85
MacArthur	8	....	....	5	.....	9	5	1	2	948.23	60.57
McClellan	56	....	....	14	3	82	3	....	.....	2,325.37	71.12
Sevier	2	....	....	17	4	21	.....	....	.....	1,248.31	56.41
Sheridan	5	....	....	10	.....	.....	.....	1	.....	1,107.38	50.30
Shelby	6	....	....	46	22	21	1	....	.....	1,941.18	71.76
Wadsworth	1	....	....	8	.....	.....	4	....	.....	565.77	41.04
Wheeler	2	....	....	3	.....	.....	.....	....	.....	1,017.9	157.8
Custer	7	....	....	11	6	.....	6	....	6	1,027.0	31.98
Devens	9	....	....	30	6	31	2	1	1	868.12	46.20
Dix	8	....	....	21	.....	37	2	....	.....	1,153.82	71.99
Dodge	30	....	....	27	10	28	2	....	7	1,555.35	72.51
Eustis	....	....	....	3	.....	28	1	....	.....	1,644.48	56.02
Funston	18	....	....	18	.....	38	8	....	46	1,111.87	45.38
Gordon	8	....	....	19	.....	31	2	....	.....	1,204.02	51.94
Grant	21	....	....	12	.....	18	8	....	.....	639.06	45.06
Humphreys	12	....	....	14	2	38	8	....	.....	854.60	30.78
Jackson	48	....	....	48	.....	126	18	1	2	1,285.99	62.73
J. E. Johnston	3	....	....	16	.....	17	.....	....	1	948.86	50.46
Henry Knox	1	....	....	2	.....	.....	.....	....	.....	1,312.69	29.84
Las Casas	1	....	4	3	.....	.....	.....	....	.....	1,696.49	56.84
Lee	1	....	....	24	12	99	5	1	4	1,041.63	63.59
Lewis	49	....	....	38	7	54	1	....	1	1,633.33	59.98
Meade	7	....	....	23	8	23	7	1	9	912.75	29.37
Pike	19	....	1	21	.....	37	.....	....	1	2,185.21	88.0
Sherman	8	....	....	22	.....	14	5	....	1	1,049.23	88.57
Taylor	4	....	....	21	6	4	1	....	1	1,364.14	92.87
Travis	8	5	....	18	.....	69	14	1	.....	3,031.71	84.89
Upton	1	....	....	43	.....	6	2	1	.....	1,886.23	83.14
Northeast Department	....	....	....	7	4	9	.....	....	5	951.21	34.49
Eastern Department	2	....	....	20	6	63	2	....	.....	917.14	24.11
Southeastern Department	5	....	2	11	.....	69	13	....	.....	1,218.23	32.89
Central Department	11	....	....	1	.....	13	.....	....	3	1,712.94	35.76
Southern Department	23	....	3	87	3	181	1	....	.....	1,118.36	46.10
Western Department	3	....	....	5	1	29	.....	....	.....	597.24	16.69
Aviation camps	141	....	1	67	.....	275	4	....	2	1,254.06	48.05
Ports of embarkation:											
Hoboken	16	....	....	10	.....	109	5	1	7	1,316.48	148.53
Newport News	23	1	....	196	7	28	9	....	4	2,178.04	132.21
Alcatraz, Disciplinary Barracks	....	....	....	.....	.....	.....	.....	....	.....	474.16	18.28
Leavenworth, Disciplinary Barracks	....	....	....	1	.....	.....	4	....	.....	1,880.6	49.54
Jefferson Barracks	....	....	....	4	4	13	.....	....	.....	1,063.93	49.45
Columbus Barracks	....	....	....	4	3	.....	.....	....	.....	1,016.65	54.30
Fort Logan	....	....	....	5	3	.....	.....	....	.....	1,117.83	46.17
Fort McDowell	1	....	....	4	.....	5	.....	....	.....	1,444.44	50.50
Fort Sill	1	....	....	22	22	43	1	....	1	450.44	24.20
Fort Slocum	1	....	....	7	4	.....	.....	....	.....	576.55	34.84
Fort Thomas	....	....	....	1	1	.....	.....	....	.....	1,009.70	51.31
West Point	....	....	....	.....	.....	.....	.....	....	.....	1,114.89	23.08
Arsenals	1	....	....	20	.....	23	7	....	1	1,096.83	40.65
Miscellaneous small stations	6	....	....	13	.....	5	22	....	1	1,036.19	25.31
Total	702	6	18	1,233	171	1,897	192	9	110	1,197.54	54.2

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Number of deaths and annual rates per 1,000 at large camps in United States, week ended Jan. 17, 1919.

Camp.	Strength.	Deaths.		Annual rate, deaths per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Beauregard	10,937	1	1	4.80	4.80
Bowie	5,997	2	2	17.34	17.34
Cody	2,714	1	1	19.15	19.15
Fremont	2,569	0			
Greene	6,291	1	0	8.26	
Greenleaf	2,928	0			
Hancock	14,025	27	27	100.14	100.14
Kearny	14,595	2	2	7.28	7.28
Logan	10,744	4	4	19.36	19.36
MacArthur	6,471	5	5	40.17	40.17
McClellan	17,421	8	8	23.88	23.88
Sevier	6,665	1	1	7.80	7.80
Shelby	11,372	0			
Sheridan	6,563	0			
Wadsworth	6,066	0			
Wheeler	2,452	0			
Custer	28,817	2	2	3.60	3.60
Devens	29,739	4	3	8.76	6.57
Dix	23,390	4	3	8.89	6.67
Dodge	20,166	5	5	12.89	12.89
Eustis	4,838	1	1	10.74	10.74
Funston	35,447	9	8	13.20	11.74
Gordon	14,901	4	4	13.95	13.95
Grant	23,191	5	4	11.21	9.67
Humphreys	11,502	2	2	9.04	9.04
Jackson	20,425	10	10	25.45	25.45
J. E. Johnston	4,439	2	2	23.4	23.4
Henry Knox	7,170	0			
Las Casas	2,023	1	1	25.70	25.70
Lee	25,411	1	1	2.04	2.04
Lewis	29,649	2	2	3.5	3.5
Meade	28,776	5	5	9.03	9.03
Pike	15,428	10	10	33.72	33.72
Sherman	15,764	5	5	16.49	16.49
Taylor	16,014	1	1	3.24	3.24
Travis	18,732	1	0	2.7	
Upton	15,198	5	5	17.11	17.11
Northeastern Department	5,740	1	0	9.05	
Eastern Department	30,563	2	2	3.40	3.40
Southeastern Department	8,665	1	1	6.0	6.0
Central Department	4,250	2	2	24.47	24.47
Southern Department	44,598	11	11	12.82	12.82
Western Department	13,063	1	0	3.98	
Aviation camps	68,205	48	42	36.50	33.62
Ports of embarkation:					
Hoboken	25,240	8	8	16.48	16.48
Newport News	33,529	8	8	12.41	12.41
All others	130,328	65	4	25.94	1.99
Total	876,298	282	264	16.73	15.66

Annual admission rate per 1,000 for certain diseases.

Diseases.	Troops in United States.		American Expeditionary forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	41.65	31.65	25.24	26.77
Dysentery	0.35	0.05	1.03	1.46
Malaria	1.06	.05	.39	.13
Venereal	73.16	68.55	30.64	27.46
Paratyphoid	.0	.0	0.13	.16
Typhoid	.23	.39	1.53	1.27
Measles	11.39	10.15	1.98	5.13
Meningitis	.53	1.06	2.06	2.05
Scarlet fever	6.52	3.68	.78	.71
Influenza	112.56	105.39		

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CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended January 25, 1919.

Alabama.—State totals: Typhoid fever 7, smallpox 38, diphtheria 5, meningitis 2, influenza 2,553.

Arkansas.—Influenza: Izard about 300, Arkadelphia 125, Conway County 82, Lee 80, Ouachita 72, Madison 64, Bentonville 58, Bradley 60, Hempstead 57, Drew 40, St. Francis 39, Marianna 29, Faulkner 28, Rogers 28, Girard 25, Siloam Springs 20, Palestine 19, Hartford 16, Iuka 7 cases (death 1, pneumonia), Dermott 4 cases (deaths 2, pneumonia), other places 24. Malaria 29, smallpox 11, scarlet fever 2, diphtheria 8, typhoid fever 5, meningitis 1, tuberculosis 9, measles 13, pellagra 1.

California.—Influenza: Total cases reported during week 9,800 (total from beginning of epidemic to Jan. 28, 290,100). Marked decrease in number of cases throughout entire State. Fifteen cases of smallpox, distributed as follows: Long Beach 4, Monterey County 1, Watsonville 5, Santa Cruz County 1, Berkeley 2, San Francisco 2. Two cases poliomyelitis—1 San Francisco,1 Oakland. One case cerebrospinal meningitis at San Francisco.

Connecticut.—Cerebrospinal meningitis, Griswold 1. Influenza, total for State 863 cases.

Florida.—State totals: Typhoid fever 6, malaria 5, measles 36, scarlet fever 4, diphtheria 10, influenza 309, chicken pox 8, meningitis 2, pneumonia 7. Influenza: Panama City 170. Meningitis: De Soto 1, Gadsden 1.

Illinois.—Diphtheria: State 186, of which in Chicago 140. Scarlet fever: State 91, of which in Chicago 57, Quincy 6. Smallpox: State 84, of which in Elgin 8, Alma 8, Salem 6, Normal 6, Peoria 8, Rock Island 12, Pekin 7, Chicago 13. Meningitis: Chicago 6, Jerseyville 1. Poliomyelitis: Chicago 1. Pneumonia: State 488, of which in Chicago 452. Gonorrhea: State 64, of which in Chicago 56. Syphilis: State 38, of which in Chicago 35. Recrudescence of influenza noted in following Illinois communities: Flora city 36 cases, Lamotte and Prairie Townships (Crawford County) 45 and 37, respectively, St. Elmo 22, Ora Township (Jackson County) 23, Jerseyville 36, Rosedale Township (Jersey County) 20, Compton 20, Oran Township (Logan County) 33, Brighton 21, Salt Creek Township (Mason County) 25, Harvard 23, Pinckneyville precinct (Perry County) 45, Belleville 30. Total new cases of influenza 3,564, against 3,506 for preceding week.

Indiana.—Influenza: State 207 cases. Syphilis 16, gonorrhea 23. Typhoid fever: Epidemic at Marengo, Crawford County. Diphtheria: Lake County 1, Laporte 1, Howard 1, Wayne 1, Grant 1, Dekalb 1, Kosciusko 4.

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gipahoa 219, Jefferson 217, St. James 210, La Salle 208, Avoyelles 204, New Orleans 1,434.

Maine.—Anthrax: Island Falls 1. Conjunctivitis: Augusta 1. Diphtheria: Bangor 1, Bucksport 1, Freeport 1, Livermore 1. German measles: Portland 1. Gonorrhea: Bath 7, Portland 2, Westbrook 1, Dover 1, Sanford 1, Camden 1. Measles: Gardiner 1. Mumps: Stonington 7. Scarlet fever: Portland 2, Norway 3, Castle Hill 1, Belfast 1, Cumberland 4, Westbrook 1. Smallpox: Bangor 1. Syphilis: Foxcroft 1, Portland 1, Paris 1, Norway 1, Bath 1. Tuberculosis: Eight cases. Whooping cough: Robbinston 8, Baileyville 4, York 1. Influenza: Augusta 39, Westbrook 17, Portland 58, Deer Isle 51, Stacyville 21, Moscow 52, scattered cases 157.

Massachusetts.—Unusual prevalence: Typhoid fever: Lawrence 9. Measles: Leominster 50.

Michigan.—Influenza: Bay City 124, Pontiac 166, Saginaw 184, Detroit 306; totals for State, 4,160 cases, 160 deaths.

Minnesota.—Smallpox (new foci): Chippewa County, Clara City village, 1; Norman County, Hendrum Township, 12; Olmsted County, Rochester, 1; Polk County, Queen Township, 1; Rice County, Faribault, 1. Fifty-two syphilis, 94 gonorrhea, 3 chancroid, reported since January 20.

New Jersey.—Influenza: 3,168 cases. Pneumonia: 446 cases.

New York.—Typhoid fever 27, of which in Mechanicsville 10; diphtheria, 200; scarlet fever, 126; whooping cough, 49; smallpox, 3,

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of which in Buffalo 1, West Seneca town 1, Oswego 1; poliomyelitis 1; pneumonia, 302. Voluntary reports: Gonorrhea 23, syphilis 123.

North Carolina.—Whooping cough 59, measles 61, diphtheria 22, scarlet fever 21, septic sore throat 18, smallpox 52, chicken pox 20, infantile paralysis 1, typhoid fever 17, meningitis 1, ophthalmia neonatorum 2, broncho-pneumonia 73, lobar pneumonia 33. Influenza: By counties—Alamance 1, Chatham 5, Clay 3, Cleveland 175, Cumberland 246, Davidson 236, Gaston 39, Johnston 229, Lincoln 30, Montgomery 8, Pitt 118, Rockingham 22, Surry 6. City of Charlotte 155.

Ohio.—Smallpox: Gallipolis Epileptic Institution 8 cases. No other undue prevalence. Influenza recurring in some localities, though declining generally.

Oregon.—Influenza: Portland 719 cases (112 deaths); by counties—Clackamas 41, Columbia 21, Curry 1 death, Gilliam 5, Hood River 3, Jackson 4, Lane 2, Lincoln 25, Linn 30 (3 deaths), Marion 14, Multnomah 10, Polk 2, Tillamook 2, Wasco 26 (3 deaths), Washington 10.

Vermont.—Little change in influenza; 1,038 cases reported from 49 towns.

Virginia.—Smallpox: Charlotte County 1, Albemarle 1, Accomac 1, Surry 2, Fauquier 2. Influenza: State total 881 cases.

Washington.—No unusual outbreak of disease. Influenza generally on decrease throughout State; slightly on increase in Tacoma. Thirteen cases smallpox reported from Yakima County.

RECIPROCAL NOTIFICATION.

Minnesota.

Cases of communicable diseases referred during December, 1918, to other State health departments by Department of Health of the State of Minnesota.

Disease and locality of notification.	Referred to health authority of—	Why referred.
Smallpox:		
Minneapolis Health Department, Hennepin County.	Minot, Ward County, N. Dak.....	Man, wife and baby exposed to smallpox while visiting in Minneapolis.
Tuberculosis:		
Mayo Clinic, Rochester, Olmsted County.	Little Rock, Pulaski County, Ark.; Los Angeles, Los Angeles County, Cal.; Ouray, Ouray County, Colo.; Des Moines, Polk County, Iowa (2 cases); Fort Dodge, Webster County, Iowa; Cedarvals, Chautauqua County, Kans.; Wichita, Sedgwick County, Kans.; Wakefield, Gogebic County, Mich.; Bessemer, Gogebic County, Mich.; Bozeman, Gallatin County, Mont.; Kathryn, Barnes County, N. Dak.; Oxford, Marquette County, Wis.; Antigo, Langlade County, Wis.; Sault Ste. Marie, Ontario, Canada.	9 moderately advanced, 3 advanced, 1 incipient, 2 (stage of disease not given) cases left Mayo clinic for homes.
Thomas Hospital, Minneapolis, Hennepin County.	Hanlontown, Worth County, Iowa; Northwood, Worth County, Iowa.	2 open cases left hospital for homes.
Pokegama Sanatorium, Pine County.	Mason City, Cerro Gordo County, Iowa..	1 open case left sanatorium for home.

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Camp Jackson zone, S. C	720	Tidewater health district, Va	23
Camp Joseph E. Johnston zone, Fla	143	Camp Travis zone, Tex	133
Fort Leavenworth zone, Kans	28	Vancouver zone, Wash	109
Camp Lee zone, Va	27	Camp Wadsworth zone, S. C	153
Camp Lewis zone, Wash	5	Camp Wheeler zone, Ga	52
Camp MacArthur zone, Tex	7	Wilmington sanitary district, N. C	382
Camp McClellan zone, Ala	15		

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 25, 1919.

	Cases.		Cases.
Camp Beauregard zone, La	4	Muscle Shoals sanitary district, Ala	1
Camp Eberts zone, Ark	4	Camp Travis zone, Tex	1
Gulfport health district, Miss	9		

State Reports for October, November, and December, 1918.

Place.	New cases reported.	Place.	New cases reported.
California (October):		California (October)—Continued.	
Butte County	13	Merced County	3
Chico	8	Placer County—	
Gridley	8	Auburn	1
Calaveras County	1	Sacramento County	1
Angeles	2	San Diego County	7
Colusa County	1	San Diego	1
Fresno County	1	San Francisco	1
Glenn County	1	San Joaquin County	6
Orland	1	Stockton	2
Kern County	2	Solano County—	
Los Angeles County—		Benecia	2
Los Angeles	1	Tehama County—	
Marin County—		Corning	1
Fort McDowell	2	Trinity County	3

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	4
Total	10
Massachusetts (December):	
Hampden County—	
Springfield	1
Middlesex County	1
Suffolk County—	
Boston	1
Total	3
New Jersey (December):	
Bergen County	1
Essex County	1
Morris County	1
Passaic County	41
Total	44
Northumberland County	5
Nottoway County—	4
Burkeville	2
Crewe	1
Pittsylvania County—	
Java	2
Powhatan County	9
Princess Anne County	10
Prince George County	3
Hopewell	2
Richmond County	2
Roanoke County—	
Salem	2
Southampton County	1
Surry County	2
Sussex County	4
Stony Creek	2
York County	2
Total	99

City Reports for Week Ended Jan. 11, 1919.

During the week ended January 11, 1919, malaria was reported at Bayonne, N. J., High Point, N. C., Little Rock, Ark., and Richmond, Va., one case each.

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Total		Typhoid fever	2
Kansas (December):		Henrico County	1
Shawnee County—		Orange County	1
Topeka State Hospital	1	Powhatan County	1
Louisiana (December):		Warwick County	2
De Soto Parish	1	Total	6
East Baton Rouge Parish	1		
Total	2		

City Reports for Week Ended Jan. 11, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga		1	Chelsea, Mass	4	
Billings, Mont	1		Galveston, Tex		1
Birmingham, Ala		2	Houston, Tex		1
Charleston, S. C		1	Raleigh, N. C		1

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[illegible], Mass.	25	29	Lakewood, Ohio	1
Baltimore, Md.	5		Lawrence, Mass.	5
Battle Creek, Mich.	1		Lincoln, Nebr.	1
Belleville, N. J.	6		Little Rock, Ark.	26
Beverly, Mass.	3		Long Branch, N. J.	1
Binghamton, N. Y.	5		Los Angeles, Cal.	22
Bloomfield, N. J.	1	3	Lowell, Mass.	5
Bluefield, W. Va.	98	30	Ludington, Mich.	3
Boston, Mass.	1	7	Lynn, Mass.	2
Bridgeport, Conn.	2		Manchester, Conn.	5
Brookline, Mass.	1	1	Manchester, N. H.	2
Brunswick, Ga.	13	4	Manistee, Mich.	1
Cambridge, Mass.	5		Manitowoc, Wis.	2
Camden, N. J.	1		Marion, Ohio.	6
Canton, Ill.	2		Melrose, Mass.	1
Centralia, Ill.	1		Middletown, N. Y.	3
Charleston, W. Va.	473	103	Montclair, N. J.	9
Chicago, Ill.	45	41	Morgantown, W. Va.	2
Cleveland, Ohio.	2		Morristown, N. J.	3
Columbia, S. C.	7	7	Mount Vernon, N. Y.	12
Cranston, R. I.	3	3	Newark, N. J.	86
Dayton, Ohio.	18	73	New Bedford, Mass.	3
Detroit, Mich.	8	3	Newburgh, N. Y.	4
Duluth, Minn.	1	3	Newburyport, Mass.	1
Durham, N. C.	6	2	Newport, Ky.	1
East Orange, N. J.	5	2	Newport, R. I.	6
Elmira, N. Y.	1	2	Newton, Mass.	2
Englewood, N. J.	14		New York, N. Y.	652
Fall River, Mass.	1		Norfolk, Va.	1
Findlay, Ohio.	13	3	North Attleboro, Mass.	2
Fitchburg, Mass.	5	5	Norwich, Conn.	1
Flint, Mich.	16	17	Oak Park, Ill.	7
Fort Worth, Tex.	2		Pasadena, Cal.	6
Framingham, Mass.	1		Perth Amboy, N. J.	2
Geneva, N. Y.	7	6	Philadelphia, Pa.	159
Grand Rapids, Mich.	8	4	Piqua, Ohio.	1
Greenwich, Conn.	6	5	Plainfield, N. J.	2
Hackensack, N. J.	2	3	Pontiac, Mich.	2
Hartford, Conn.	25	7	Port Chester, N. Y.	3
Haverhill, Mass.	5	3	Poughkeepsie, N. Y.	2
Henderson, Ky.	13	7	Richmond, Va.	2
Highland Park, Mich.	5	3	Rochester, N. Y.	17
High Point, N. C.	2		Rome, N. Y.	2
Hoquiam, Wash.	1		Saginaw, Mich.	1
Hutchinson, Kans.	1	1	Salem, Mass.	13
Ithaca, N. Y.	9	2	San Diego, Cal.	2
Jamestown, N. Y.	9		Sandusky, Ohio.	3
Jersey City, N. J.	1		San Francisco, Cal.	24
Joplin, Mo.				

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PNEUMONIA—Continued.

City Reports for Week Ended Jan. 11, 1919—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Sault Ste. Marie, Mich.	3	.....	Waterbury, Conn.	6	.....
Schenectady, N. Y.	1	.....	Watertown, Mass.	4	1
Sioux Falls, S. Dak.	10	7	Westfield, Mass.	1	1
Somerville, Mass.	6	4	West New York, N. J.	2	1
Springfield, Mass.	12	7	Wichita, Kans.	3	1
Stockton, Cal.	11	11	Wilmington, Del.	13	13
Toledo, Ohio	4	3	Winston-Salem, N. C.	14	9
Trenton, N. J.	2	2	Yonkers, N. Y.	10	7
Utica, N. Y.	1	.....			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for October and December, 1918.

Place.	New cases reported.	Place.	New cases reported.
California (October):		Nebraska (October):	
Humboldt County	2	Buffalo County	1
San Francisco	2	Custer County	1
Santa Barbara County—		Total	2
Santa Barbara	2	New Jersey (December):	
Tulare County	1	Middlesex County	1
Total	7	North Carolina (December):	
Illinois (December):		Halifax County	1
Bureau County—		Randolph County	2
Arispie Township	1	Total	3
Morgan County—		Ohio (December):	
Meredosia precinct	1	Lucas County	1
Total	2	Pennsylvania (December):	
Iowa (December):		Allegheny County	1
Hamilton County	1	Philadelphia County	1
Kansas (December):		Total	2
Chautauqua County—		Virginia (December):	
Sedan (R. D.)	1	Augusta County—	
Pratt County—		Basic	1
Pratt	1	Lee County	1
Total	2	Nottoway County	1
Louisiana (December):		Roanoke County—	
Rapides Parish	2	Salem	1
Maryland (December):		Scott County	1
Baltimore County—		Total	5
Chesaco Park	1		
Massachusetts (December):			
Essex County—			
Haverhill	1		
Topsfield (town)	1		
Suffolk County—			
Chelsea	1		
Total	3		

City Reports for Week Ended Jan. 11, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1	.....	Newark, N. J.	1	.....
Chicago, Ill.	1	.....	Richmond, Va.	1	.....
Dallas, Tex.	1	.....	St. Louis, Mo.	1	.....
Milwaukee, Wis.	1	.....			

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RABIES IN ANIMALS.

City Reports for Week Ended Jan. 11, 1919.

During the week ended January 11, 1919, rabies in animals was reported at Asheville, N. C.; Memphis, Tenn.; and San Antonio, Tex., 2 cases each.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 25, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	1	Camp Pike zone, Ark	7
Camp Funston zone, Kans	2	Portsmouth-Kittery sanitary district, N. H. and Me	1
Gas and Flame School zone, Ga. and Ala	1	Camp Sevier zone, S. C	1
Gulfport health district, Miss	2	Camp Sherman zone, Ohio	5
Camp Joseph E. Johnston zone, Fla	1	Camp Zachary Taylor zone, Ky. and Ind	2
Camp MacArthur zone, Tex	1	Tidewater health district, Va	1
Camp Merritt zone, N. J	4		
Fort Oglethorpe zone, Ga. and Tenn	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 214.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended Jan. 25, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	1	Picric Acid Plant zone, Ga	2
Gas and Flame School zone, Ga. and Ala	2	Camp Polk zone, N. C	1
Gerstner Field zone, La	35	Camp Zachary Taylor zone, Ky. and Ind	1
Camp Hancock zone, Ga	1	Tidewater health district, Va	1
Camp McClellan zone, Ala	2	Camp Wadsworth zone, S. C	1
Muscle Shoals sanitary district, Ala	2	Camp Wheeler zone, Ga	1

State Reports for October and December, 1918—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
California (October):						
Alameda County—						
Oakland	2			1	1	
Butte County—						
Chico	8				8	
Contra Costa County	32			1	31	
Fresno County	3				3	
Fresno City	1				1	
Glenn County	3			1	2	
Kern County	2				2	
Maricopa	1				1	
Kings County	1				1	
Los Angeles County	1				1	
Long Beach	1				1	
Los Angeles	4				4	
Napa County—						
Napa	1				1	
Orange County—						
Santa Ana	2			1	1	
San Diego County—						
San Diego	1				1	
San Francisco	3				3	
San Joaquin County	2				2	
Santa Clara County	1				1	
Palo Alto	2				2	
San Jose	2				2	

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Seneca Township	2					2
Blissfield	2				2	
Clayton	2			1	1	
Marquette County—						
Marquette	1				1	
Muskegon County—						
Muskegon Heights	4				4	
Oakland County—						
Pontiac	1			1		
Oceana County—						
Grant Township	1				1	
Saginaw County—						
Saginaw	1				1	
St. Joseph County—						
Fabius Township	1					1
Washtenaw County—						
Sharon Township	1				1	
Wayne County—						
Detroit	3				3	
Total	69			4	52	13
Minnesota (December):						
Anoka County—						
Anoka	1					1
Carlton County—						
Carlton	1				1	
Knife Falls Township	1			1		
Clearwater County—						
Popple Township	6				6	
Dakota County—						
Lakeville Township	1			1		
Dodge County—						
West Concord	9				9	
Freeborn County—						
Manchester Township	1				1	
Hennepin County—						
Minneapolis	26			6	20	
West Minneapolis	1				1	
Bloomington Township	6				6	

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Duluth	1		1			
Sibley County—						
Severence Township	1				1	
Wright County—						
Cokato Township	3				3	
Middleville Township	3				3	
Total	180		1	9	168	2
Ohio (December):						
Belmont County	3				2	1
Butler County	54		4	2	16	32
Clinton County	4					4
Coshocton County	22					22
Crawford County	6				1	5
Cuyahoga County	26				1	25
Defiance County	1					1
Fayette County	8					8
Franklin County	1				1	
Fulton County	1					1
Hamilton County	9				3	6
Hardin County	2					2
Harrison County	2					2
Highland County	1				1	
Hocking County	1				1	
Huron County	1					1
Jefferson County	9				8	1
Lake County	1					1
Lorain County	37		2		6	29
Lucas County	16				11	5
Marion County	10				1	9
Montgomery County	21				6	15
Muskingum County	7			1	1	5
Paulding County	6					6
Pike County	1					1
Portage County	1				1	
Preble County	1					1
Sandusky County	2					2
Scioto County	1				1	
Seneca County	2				2	
Stark County	1					1
Warren County	7				7	
Total	265		6	3	70	186

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Jacksonville	5	
Jacksonville Precinct	1	
Peoria County—		
Peoria	3	
Perry County—		
St. Johns	1	
Rock Island County—		
Moline	55	
Shelby County—		
Richland Township	2	
St. Clair County—		
East St. Louis	4	
Tazewell County—		
Pekin	5	
Tremont Township	1	
Wayne County—		
Barnhill Township	1	
Total	178	
Iowa (December):		
Buena Vista County	1	
Butler County	3	
Carroll County	2	
Cerro Gordo County	5	
Clayton County	6	
Dallas County	2	
Des Moines County	6	
Hardin County	1	
Jasper County	2	
Linn County	6	1
Monona County	4	
Osceola County	7	
Polk County	10	
Pottawattamie County	21	
Story County	3	
Wapello County	2	
Washington County	3	
Webster County	2	
Total	86	1
Louisiana (December):		
Acadia Parish	15	
Allen Parish	2	
Beauregard Parish	6	
Calcasieu Parish	6	
Iberia Parish	1	
Jefferson Parish	1	
Lafayette Parish	1	
Seward County	8	
York County	1	
Total	152	
Nebraska (November):		
Butler County	2	
Cass County	2	
Colfax County	2	
Custer County	2	
Douglas County	28	
Garfield County	1	
Holt County	3	
Hooker County	3	
Lancaster County	23	
Madison County	1	
Nucholls County	10	
Scotts Bluff County	1	
Seward County	1	
Total	79	
New Jersey (December):		
Burlington County	3	
North Carolina (December):		
Bertie County	5	
Cabarrus County	5	
Durham County	6	
Forsyth County	13	
Gaston County	2	
Guilford County	37	
Halifax County	1	
Mecklenburg County	2	
New Hanover County	1	
Robeson County	4	
Rockingham County	5	
Rowan County	1	
Rutherford County	3	
Stanly County	1	
Wake County	11	
Total	97	
North Dakota (December):		
Cass County	1	
Richland County	1	
Total	2	

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TYPHOID FEVER—Continued.

State Reports for October, November, and December, 1918.

Place.	New cases reported.
California (October):	
Alameda County—	
Alameda	3
Berkeley	1
Oakland	15
Butte County—	
Chico	4
Contra Costa County	1
Martinez	3
Fresno County	2
Clovis	3
Imperial County	2
El Centro	8
Kern County	1
Taft	1
Kings County	1
Lassen County	1
Los Angeles County	1
Glendale	1
Los Angeles	12
Long Beach	2
Orange County—	
Anaheim	1
Riverside County	1
Perris	1
Riverside	3
Sacramento County—	
Sacramento	4
San Benito County	1
San Bernardino County	2
San Diego County—	
Escondido	1
San Diego	3
San Francisco	7
San Joaquin County	2
Stockton	4
Santa Barbara County—	
Santa Barbara	3
Santa Maria	1
Santa Cruz County—	
Santa Cruz	2
Siskiyou County—	
Dunsmuir	1
Sonoma County	1
Stanislaus County—	
Oakdale	1
Tulare County	1
Ventura County—	
Santa Paula	1
Total	103
Illinois (December):	
Adams County—	
Quincy	3
Cook County—	
Chicago	13
Jackson County—	
De Soto Township	2
Lake County—	
North Chicago	1
Madison County—	
Alton	1
Edwardsville	1
Morgan County—	
Jacksonville	1
Randolph County—	
Sparta	1
Rock Island County—	
Moline	2
Rock Island	4
St. Clair County—	
Belleville	1
Will County—	
Joliet	1
Total	31

Place.	New cases reported.
Kansas (December):	
Bourbon County—	
Mapleton (R. D.)	1
Butler County—	
Augusta	1
El Dorado (2 R. D.)	5
Leon (R. D.)	1
Midian	2
Cherokee County—	
Baxter Springs	1
Coffey County—	
Burlington	1
Douglas County—	
Lawrence	2
Linn County—	
Pleasanton	2
Logan County—	
Russell Springs	1
Marshall County—	
Irving	1
Montgomery County—	
Independence	2
Sedgwick County—	
Wichita	3
Wabaunsee County—	
Eskridge (R. D.)	2
Wyandotte County—	
Kansas City	2
Total	27
Louisiana (December):	
Ascension Parish	1
Avoyelles Parish	2
Caddo Parish	4
Calcasieu Parish	2
Iberia Parish	1
Iberville Parish	5
Jackson Parish	3
Jefferson Parish	1
Jefferson Davis Parish	1
Lafourche Parish	1
Madison Parish	3
Orleans Parish	6
Ouachita Parish	1
Rapides Parish	2
Red River Parish	1
Richland Parish	1
St. John Parish	1
St. Landry Parish	4
St. Tammany Parish	2
Tangipahoa Parish	2
Terrebonne Parish	1
Vermilion Parish	1
Vernon Parish	3
Total	49
Maryland (December):	
Baltimore City	15
Allegany County—	
Westernport	2
Luke	1
Anne Arundel County—	
Jacobs Hill	1
Millersville	2
Brooklyn	3
Baltimore County—	
Parkton	2
Highlandtown	1
Essex	1
Violetville	1
Catonsville	1
Halethorpe, R. D.	1
Woodlawn	1
Stevenson	6
Rossville	1

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TYPHOID FEVER—Continued.

State Reports for October, November, and December, 1918—Continued.

Place.	New cases reported.
Maryland (December)—Continued.	
Caroline County—	
Hillsboro, R. D.	1
Hollandsville, R. D.	1
Ridgely, R. D.	1
Cecil County—	
Providence	1
Charles County—	
Indianhead	2
Pomfret	2
Marbury	4
Rison	1
Mason Springs	1
Dorchester County—	
Wingate	1
Andrews	1
Bishops Head	1
Cambridge	4
Toldville	3
Airey	1
Hurlock	1
Frederick County—	
Knoxville	1
Brunswick, R. D.	1
Harford County—	
Havre de Grace	3
Kent County—	
Chestertown	1
Montgomery County—	
Fairland	1
Cloppers	1
Prince Georges County—	
Branchville	3
Queen Annes County—	
Centerville	1
Centerville, R. D.	1
Chester	1
Somerset County—	
Hopewell, R. D.	1
Hopewell	1
Dougherty town	1
Crisfield	1
Crisfield, R. D	1
Talbot County—	
Chapel	1
Washington County—	
Bakersville	1
Millstone	1
Sharpsburg	1
Hancock	1
Hagerstown	1
Antietam	1
Wicomico County—	
Parsonsburg, R. D.	1
Bivalve	1
Nanticoke	1
Worcester County—	
Snow Hill	1
Total	95
Massachusetts (December):	
Bristol County—	
Fall River	6
New Bedford	1
Essex County—	
Beverly	1
Gloucester	1
Lawrence	3
Lynn	1
Lynnfield (town)	1
Methuen	1
Peabody	3
Rockport (town)	1
Rowley (town)	4
Hampshire County—	
Holyoke	1
Massachusetts (December)—Continued.	
Middlesex County—	
Cambridge	2
Everett	2
Natick (town)	1
Newton	1
Norfolk County—	
Cohasset (town)	1
Walpole (town)	2
Plymouth County—	
Brockton	1
Hingham (town)	1
Suffolk County—	
Boston	6
Chelsea	1
Worcester County—	
Athol (town)	1
Blackstone (town)	1
Total	44
Michigan (December):	
Bay County—	
Bay City	1
Berrien County—	
Watervleit	1
Chippewa County—	
Sault Ste. Marie	1
Eaton County—	
Grand Ledge	1
Genesee County—	
Flint	1
Hillsdale County—	
Jefferson Township	1
Houghton County—	
Laird Township	1
Ingham County—	
Onondaga Township	1
Kalamazoo County—	
Kalamazoo	1
Kent County—	
Grand Rapids	2
Wyoming Township	1
Lapeer County—	
Lapeer	1
Lenawee County—	
Fairfield Township	1
Tecumseh	4
Livingston County—	
Howell	1
Midland County—	
Ineersoll Township	5
Oakland County—	
Holly	1
Osceola County—	
Middle Branch Township	1
St. Clair County—	
Port Huron Township	1
Marine City	1
Wayne County—	
Detroit	5
Wyandotte	1
Total	34
Minnesota (December):	
Anoka County—	
Anoka	1
Bigstone County—	
Prior Township	1
Chippewa County—	
Montevideo	1
Hennepin County—	
Minneapolis	2
Minnetonka Township	1
Ramsey County—	
St. Paul	2

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Lancaster County	2
Platte County	1
Scotts Bluff County	1
Total	11

New Jersey (December):

Atlantic County	1
Bergen County	6
Burlington County	4
Camden County	5
Cumberland County	3
Essex County	-
Hudson County	6
Mercer County	1
Middlesex County	1
Monmouth County	11
Union County	3
Total	43

North Carolina (December):

Alexander County	1
Anson County	1
Beaufort County	1
Caldwell County	2
Carteret County	1
Catawba County	1
Chatham County	1
Chowan County	1
Cleveland County	1
Columbus County	2
Craven County	1
Duplin County	1
Durham County	3
Forsyth County	1
Gaston County	1
Gates County	2
Graham County	1
Guilford County	2
Iredell County	1
Jackson County	2
Johnston County	4
Mecklenburg County	2
Nash County	1
Hardin County	1
Harrison County	1
Henry County	2
Highland County	2
Lawrence County	3
Licking County	2
Logan County	1
Lorain County	1
Lucas County	2
Mahoning County	1
Meigs County	2
Mercer County	1
Miami County	2
Ross County	2
Sandusky County	1
Seneca County	1
Shelby County	1
Stark County	1
Summit County	4
Trumbull County	1
Tuscarawas County	1
Union County	5
Van Wert County	1
Warren County	1
Wood County	2
Total	86

Pennsylvania (December):

Adams County	3
Allegheny County	20
Armstrong County	7
Bedford County	1
Berks County	2
Blair County	2
Bradford County	6
Butler County	14
Cambria County	1
Center County	1
Chester County	6
Clarion County	3
Crawford County	1
Cumberland County	4
Dauphin County	3
Delaware County	5

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Wyoming (December)

City Reports for Week Ended Jan. 11, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams, Mass.	14,406	4							2	1
Adrian, Mich.	11,570	1								
Akron, Ohio	93,604	47	2		4		1		3	
Alameda, Cal.	28,433	33								
Alexandria, La.	16,232	6	1		1					
Allentown, Pa.	65,109	5			3		4			
Alton, Ill.	23,783	14	2	1						1
Altoona, Pa.	59,712		10				2			
Ann Arbor, Mich.	15,041	8	1				2			
Appleton, Wis.	18,005	8								
Arlington, Mass.	13,073	12								
Asheville, N. C.	25,656				1		1		15	
Ashtabula, Ohio	22,008	6								
Atlanta, Ga.	196,144	98	5	1	1		2		1	5
Atlantic City, N. J.	59,515	19							2	1
Attleboro, Mass.	19,776	13								
Auburn, N. Y.	37,823	14	1				1			
Austin, Tex.	35,612	11								
Bakersfield, Cal.	17,543						2			
Baltimore, Md.	594,637	279	20	3	14		28		35	22
Barre, Vt.	12,401	4								
Battle Creek, Mich.	30,159	4	4		1					
Bayonne, N. J.	72,204		10		1		1		1	
Beatrice, Nebr.	10,437	10								1
Beaumont, Tex.	28,851	22								1
Beaver Falls, Pa.	13,749		3							
Bedford, Ind.	10,613	4								1
Bellaire, Ohio	14,575	4	1							
Belleville, N. J.	13,797		1						3	
Beloit, Wis.	18,547	2			1				1	
Benton Harbor, Mich.	11,099	4	1	1						
Berkeley, Cal.	60,427	42	1				1		1	
Berlin, N. H.	13,892	9			1					
Beverly, Mass.	22,128	16	1							
Biddeford, Me.	17,760	9								
Billings, Mont.	15,123	15					2		6	
Binghamton, N. Y.	54,864	14	4				1			
Birmingham, Ala.	189,716	95	3		5		1		6	6

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FOREIGN.

BRAZIL.

Influenza—Sao Paulo.

From October 20 to November 17, 1918, influenza was reported present at Sao Paulo, Brazil, with an estimated weekly occurrence of about 2,000 fatalities.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Disease.	Dec. 11–20, 1918.		Dec. 21–31, 1918.		Remaining under treatment Dec. 31, 1918.
	New cases.	Deaths.	New cases.	Deaths.	
Diphtheria	5	1	1	.....	3
Leprosy	.....	.....	.....	.....	1[2]
Malaria	6	.....	24	.....	141
Paratyphoid fever	.....	.....	1	.....	3
Scarlet fever	.....	.....	.....	.....	1
Typhoid fever	5	1	4	.....	144

[1] From the interior 38. [2] From the interior 18.

Influenza—Habana—Regla.

During the period from December 11 to 31, 1918, 339 cases of influenza with 60 fatalities, and 39 cases of bronchopneumonia with 24 fatalities, were notified at Habana.

At Regla, during the same period, 60 cases of influenza were notified.

SAMOA.

Influenza.

Influenza has been reported present in Samoa, with more than 8,000 fatalities occurring among natives in western Samoa. On January 24, 1919, the epidemic was stated to be possibly concluded.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Jan. 31, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17-30	4	5	
India:				
Calcutta	Nov. 3-16		48	
Madras	Nov. 3-23	87	70	
Rangoon	Oct. 13-26	2	2	
Java:				
West Java				Oct. 31-Nov. 6, 1918: Cases, 22; deaths, 11.
Batavia	Oct. 31-Nov. 6	21	11	
Philippine Islands:				
Manila	Dec. 1-7	7	4	
Provinces				Dec. 1-7, 1918: Cases, 174; deaths, 135.
Bataan	Dec. 1-7	12	11	
Batangas	do	16	12	
Bulacan	do	1		
Cavite	do	27	23	
Iloilo	do	19	14	
Laguna	do	2	1	
Oriental Negros	do	2	2	
Pampanga	do	1	1	
Pangasinan	do	74	58	
Tayabas	do	12	7	
Union	do	8	6	

PLAGUE.

Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
India:				
Madras Presidency	Nov. 3-23	299	200	
Rangoon	Oct. 13-Nov. 2	14	14	

SMALLPOX.

Canada:				
Nova Scotia—				
Halifax	Jan. 5-11	15		
Sydney	do	1		
Ontario—				
Ottawa	Jan. 12-18	4		
Quebec—				
Montreal	do	9		
Canal Zone:				
Colon	Dec. 29-Jan. 4	1		
China:				
Chungking	Nov. 17-30			Present.
Nanking	Dec. 1-7			Do.
India:				
Calcutta	Nov. 3-9		1	
Madras	Nov. 3-23	17	17	
Rangoon	Oct. 20-26	1	1	
Java:				
West Java				Oct. 31-Nov. 6, 1918: Cases, 28; deaths, 21.
Batavia	Oct. 31-Nov. 6	18	18	
Mesopotamia:				
Bagdad	Oct. 19-Nov. 15	84	24	
Newfoundland:				
St. Johns	Jan. 4-10	1		
Outports—				
Avondale	do	3		
Bay of Islands	Jan. 11-17	6		
Musgrave Harbor	do	6		

TYPHUS FEVER.

Egypt:				
Alexandria	Nov. 27-Dec. 2	4	5	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-30		1	
Brazil:				
Ceara	Sept. 14-21	1		
Colombia:				
Barranquilla	Nov. 8-Dec. 28		3	
Egypt:				
Alexandria	Oct. 14-Nov. 25	63	39	
Greece:				
Saloniki	Sept. 29-Oct. 19		19	
Japan:				
Nagasaki	Nov. 10-Dec. 1	4	2	
Java:				
East Java				Oct. 7-21, 1918: Cases, 5.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 8.
West Java				Oct. 2-23: Cases, 31; deaths, 6.
Batavia	Oct. 2-23	15	4	
Siberia:				
Vladivostok	Sept. 1-Nov. 30	16		
Spain:				
Huelva	Oct. 1-31		2	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Pernambuco	Oct. 1-15	1		
Ecuador:				
Babahoyo	Nov. 1-30	1		
Duran	Nov. 1-15	1	1	
Guayaquil	Nov. 1-30	77	42	
Milagro	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		

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Communicable dise

	States.	Septic sore throat.	Smallpox.	Tetanus.	Trachoma.	Trichinosis.	Tuberculosis (all forms).	Tuberculosis (laryngeal).	Tuberculosis (pulmonary).	Typhoid fever.	Typhus fever.	Whooping cough.	[illegible]
1	Alabama[1]		+	+	+		+		+	+	+	+	
2	Alaska[17]		+		+		+			+	+	+	
3	Arizona		+		+		+			+	+	+	
4	Arkansas		+		+		+	+	+	+	+	+	
5	California		+		+	+	+			+	+	+	
6	Colorado[18]	+	+	+	+		+			+	+	+	
7	Connecticut		+		+		+			+	+	+	
8	Delaware[2]		+	+	+		+		+	+	+	+	
9	District of Columbia[3]		+		+		+			+	+	+	
10	Florida		+				+			+			
11	Georgia		+							+			
12	Hawaii[4]		+							+	+	+	
13	Idaho[19]		+		+		+			+	+	+	
14	Illinois[19]	+	+	+	+	+	+			+	+	+	
15	Indiana		+		+		+		+	+	+	+	
16	Iowa		+							+			
17	Kansas[5]	+	+	+	+	+	+			+	+	+	
18	Kentucky		+		+		+			+			
19	Louisiana		+		+		+			+	+	+	
20	Maine	+	+	+	+		+			+	+	+	
21	Maryland		+		+		+	+		+	+	+	
22	Massachusetts[6]	+	+	+	+	+	+			+	+	+	
23	Michigan[7]		+		+		+		+	+	+	+	
24	Minnesota		+							+			
25	Mississippi		+							+			
26	Missouri		+		+		+			+	+	+	
27	Montana		+							+			
28	Nebraska		+							+			
29	Nevada[8]		+							+			
30	New Hampshire[9]		+							+			

Missouri					
Montana		+			
Nebraska		+		+	
Nevada		+			
New Hampshire		+	+	+	
New Jersey	+			+	
New Mexico		+	+	+	
New York		+	+	+	+
North Carolina		+	+	+	
North Dakota		+			
Ohio	+			+	+
Oklahoma		+	+	+	
Oregon		+	+	+	
Pennsylvania			+		
Rhode Island		+			
South Carolina		+	+	+	
South Dakota		+		+	
Tennessee					
Texas		+	+	+	+
Utah		+			
Vermont	+			+	
Virginia		+	+	+	+
Washington		+	+	+	
West Virginia		+		+	
Wisconsin		+		+	
Wyoming		+	+	+	

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Jasper County	35	Walthall County	7
Jefferson County	41	Warren County	92
Jones County	21	Washington County	72
Kemper County	4	Wayne County	6
Lafayette County	19	Wilkinson County	2
Lamar County	20	Winston County	26
Lauderdale County	21	Yalobusha County	17
Lawrence County	86	Yazoo County	104
Lee County	28		
Leflore County	203	Total	2,742
Lincoln County	21		

City Reports for Week Ended Jan. 18, 1919.

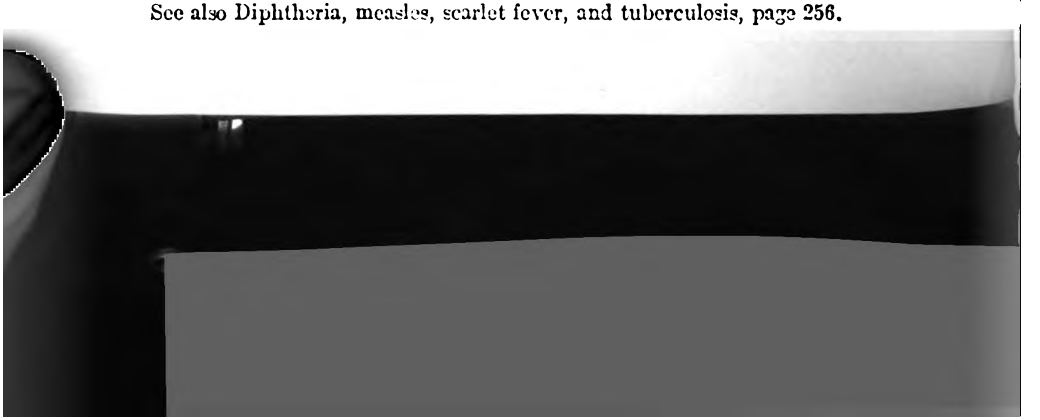
Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Joplin, Mo	2	.....	Memphis, Tenn	1	.....
Little Rock, Ark	1	.....	Savannah, Ga	.....	1

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 1, 1919.

	Cases.		Cases.
Bremerton zone, Wash	3	Camp Polk zone, N. C	2
Camp Devens zone, Mass	3	Portsmouth and Norfolk County health district, Va	5
Gas and Flame School zone, Ga. and Ala	2	Camp Sevier zone, S. C	9
Camp Gordon zone, Ga	2	Camp Sheridan zone, Ala	1
Gulfport health district, Miss	1	Camp Zachary Taylor zone, Ky. and Ind	9
Camp Humphreys zone, Va	1	Tidewater health district, Va	6
Camp Jackson zone, S. C	1	Camp Travis zone, Tex	1
Camp Joseph E. Johnston zone, Fla	51	Camp Wadsworth zone, S. C	9
Camp Lee zone, Va	1	Camp Wheeler zone, Ga	2
Camp Logan zone, Tex	4		
Camp Pike zone, Ark	4		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 256.



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State Reports for December, 1918.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
Indiana		113	210	Nevada			3
Mississippi	82	265	55	West Virginia	39	11	26
Nebraska	71	17	40				

City Reports for Week Ended Jan. 18, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Aberdeen, S. Dak	15,926	5								
Adams, Mass	14,405	2	1							
Adrian, Mich	11,570	3			1					
Akron, Ohio	93,604	56	1		2		2		5	
Alameda, Cal	28,433	20	1							
Albany, N. Y	105,632		5						6	
Alexandria, La	16,232	7			2					
Allentown, Pa	65,109		5				2			
Alton, Ill	23,783	14								1
Ann Arbor, Mich	15,041	5								
Ansonia, Conn	16,954	4								1
Appleton, Wis	18,005	2								
Arlington, Mass	13,073	7								
Asheville, N. C	25,656	28					1		1	12
Ashtabula, Ohio	22,008	6								

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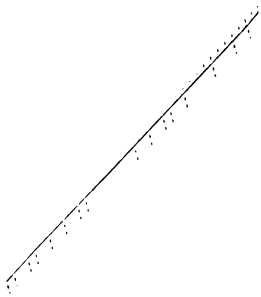

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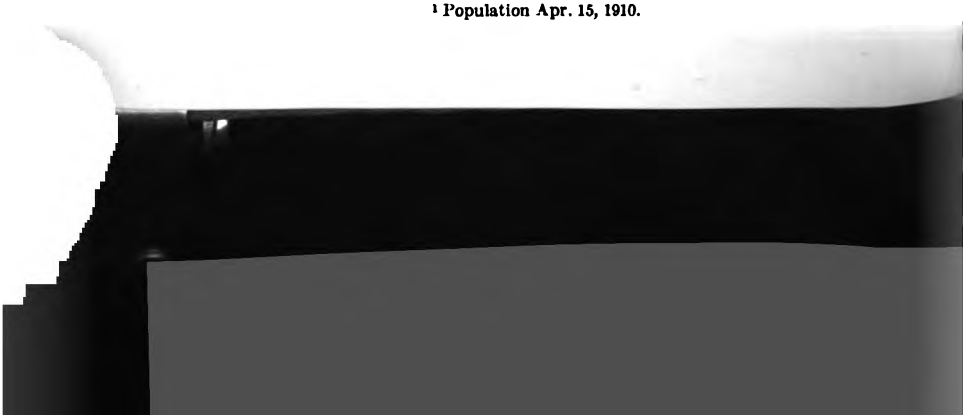
Escanaba, Mich.	15,854	5								
Eureka, Cal.	15,142	11								
Evanston, Ill.	29,304	11			1					
Everett, Mass.	40,160	11	2		1		2		2	
Fall River, Mass.	129,828	40	5	1	17	1	3		4	3
Fargo, N. Dak.	17,872	10								
Findlay, Ohio.	[1] 14,858	5	3						1	1
Flint, Mich.	57,386		8		3		3			2
Fond du Lac, Wis.	21,486	5								
Fort Scott, Kans.	10,564	2								
Fort Wayne, Ind.	78,014	25	1							1
Fort Worth, Tex.	109,597	48							2	4
Fostoria, Ohio.	10,959	7					2			
Framingham, Mass.	14,149	7								
Frederick, Md.	11,225	9								
Freeport, Ill.	19,844	1								1
Fremont, Ohio.	11,034	3							2	1
Fresno, Cal.	38,314	23							1	1
Galesburg, Ill.	24,629	11			3		1			
Galveston, Tex.	42,650	13								
Geneva, N. Y.	13,915	4					1			
Gloversville, N. Y.	22,314								1	
Grand Forks, N. Dak.	16,342	3								
Grand Rapids, Mich.	132,861	37	6				3		13	1
Great Falls, Mont.	[1] 13,948	12			2					1
Green Bay, Wis.	30,017	13	1						2	2
Greenfield, Mass.	12,251	5	1		2		1		2	1
Greensboro, N. C.	20,171	10								
Greenwich, Conn.	19,594				1					1
Hackensack, N. J.	17,412	6							1	
Hammond, Ind.	27,016	8								
Harrisburg, Pa.	73,276		2				1			
Harrison, N. J.	17,345						4		1	
Hartford, Conn.	112,831	61	2		21	4	3		7	6
Haverhill, Mass.	49,180	28	3				1		2	2
Hazelton, Pa.	28,981		1				1			
Highland Park, Mich.	33,859	9	2				1			
Hoboken, N. J.	78,324	14	2		1				6	
Holland, Mich.	12,459	3								
Holyoke, Mass.	66,593	14					1		2	1
Houston, Tex.	116,878	70							3	6
Hudson, N. Y.	12,898	1								
Hutchinson, Kans.	21,461		3		1					
Independence, Mo.	11,964	6	1				1			1
Indianapolis, Ind.	233,622	93	31	7	5		5		6	9
Ironton, Ohio.	14,079	8					1			
Jamestown, N. Y.	37,431	11	5						1	1

[1] Population Apr. 15, 1910.



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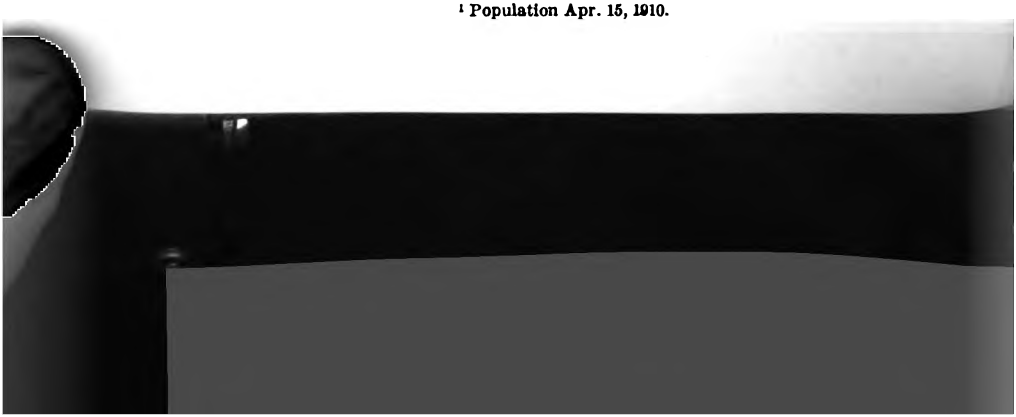
Oklahoma City, Okla	97,588	25	.....	.....	2	.....	1	.....	1	1
Olean, N. Y	16,927	9	.....	.....	.....	.....	.....	.....	.....	.....
Omaha, Nebr	177,777	47	3	.....	3	.....	6	.....	.....	2
Orange, Conn	14,303	6	.....	.....	.....	.....	.....	.....	.....	4
Orange, N. J	33,636	12	2	.....	.....	.....	.....	.....	2	1
Oshkosh, Wis	36,549	6	.....	.....	.....	.....	.....	.....	1	.....
Ossining, N. Y	14,064	11	3	.....	.....	.....	.....	.....	.....	.....
Parkersburg, W. Va	21,059	12	.....	.....	.....	.....	.....	.....	1	1
Passaic, N. J	74,478	22	1	.....	.....	.....	.....	.....	1	2
Peekskill, N. Y	19,034	7	.....	.....	.....	.....	.....	.....	.....	.....
Peoria, Ill	72,184	37	.....	.....	.....	.....	.....	.....	.....	4
Perth Amboy, N. J	42,646	14	.....	.....	.....	.....	.....	.....	1	1
Philadelphia, Pa	1,735,514	715	85	12	18	1	43	1	175	68
Piqua, Ohio	14,275	3	.....	.....	.....	.....	2	.....	.....	.....
Pittsburgh, Pa	586,196	.....	28	.....	1	.....	10	.....	19	.....
Pittsburg, Kans	18,340	.....	.....	.....	.....	.....	.....	.....	.....	1
Pittsfield, Mass	39,678	17	.....	.....	.....	.....	.....	.....	.....	3
Plainfield, N. J	24,330	14	.....	.....	1	.....	2	.....	.....	1
Plattsburg, N. Y	13,111	5	5	2	1	.....	.....	.....	.....	.....
Plymouth, Mass	14,001	4	.....	.....	.....	.....	.....	.....	.....	.....
Plymouth, Pa	19,439	.....	.....	.....	10	.....	.....	.....	.....	.....
Pontiac, Mich	18,006	4	3	.....	.....	.....	.....	.....	.....	.....
Port Chester, N. Y	16,727	8	3	.....	1	.....	.....	.....	.....	1
Portland, Me	64,720	33	.....	.....	.....	.....	2	.....	.....	1
Portland, Oreg	308,399	187	5	.....	2	.....	3	.....	4	6
Portsmouth, Va	40,693	.....	.....	.....	.....	.....	.....	.....	3	2
Pottstown, Pa	16,987	.....	4	.....	11	.....	.....	.....	.....	.....
Pottsville, Pa	22,717	.....	4	.....	.....	.....	.....	.....	3	.....
Poughkeepsie, N. Y	30,786	5	2	.....	.....	.....	1	.....	1	.....
Providence, R. I	259,895	138	26	2	1	.....	1	1	.....	5
Quincy, Mass	39,022	16	2	.....	.....	.....	1	.....	1	3
Raleigh, N. C	20,274	19	.....	.....	.....	.....	1	.....	.....	1
Reading, Pa	111,607	.....	9	.....	72	.....	.....	.....	.....	.....
Redlands, Cal	14,573	6	.....	.....	.....	.....	1	.....	.....	1
Reno, Nev	15,514	15	.....	.....	.....	.....	.....	.....	.....	.....
Richmond, Va	158,702	71	6	.....	7	.....	4	.....	2	8
Rochester, N. Y	264,714	69	30	.....	1	.....	13	.....	9	7
Rockford, Ill	56,739	17	2	.....	.....	.....	.....	.....	.....	.....
Rock Island, Ill	29,452	11	2	.....	.....	.....	.....	.....	.....	.....
Rocky Mount, N. C	12,673	17	1	1	.....	.....	.....	.....	.....	.....
Rome, N. Y	24,259	.....	.....	.....	1	.....	1	.....	.....	.....
Rutland, Vt	15,038	12	.....	.....	.....	.....	.....	.....	.....	.....
Sacramento, Cal	68,984	64	.....	.....	.....	.....	.....	.....	1	3
Saginaw, Mich	50,469	28	1	.....	.....	.....	2	.....	.....	1
St. Joseph, Mo	86,498	46	3	1	.....	.....	3	.....	1	4
St. Louis, Mo	768,630	232	29	2	3	.....	12	.....	42	19
St. Paul, Minn	252,465	77	10	3	4	.....	15	.....	11	13
Salt Lake City, Utah	121,623	63	7	.....	.....	.....	1	.....	.....	2
San Angelo, Tex	[1] 10,321	5	.....	.....	.....	.....	.....	.....	.....	.....
San Antonio, Tex	128,215	9	.....	.....	2	.....	.....	.....	10	7

[1] Population Apr. 15, 1910.



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Springfield, Ill	62,63	32	2		1					1
Springfield, Mass	108,668	38								
Springfield, Mo	41,169	9								
Springfield, Ohio	52,206	24			31				1	2
Steelton, Pa	15,750		2						2	
Steubenville, Ohio	28,259	7	2							
Stockton, Cal	38,709	46					1			
Superior, Wis	47,167	13				1	3			
Syracuse, N. Y	158,559	55	10	1	2		4	1	4	5
Tacoma, Wash	117,446		1		1		3			
Taunton, Mass	36,610	20								
Tiffin, Ohio	12,962		1				2		1	
Toledo, Ohio	202,010	75	7			1	5	1	7	7
Topeka, Kans	49,538	11	1		2		1			
Trenton, N. J	113,974	61	8	1					11	5
Troy, N. Y	78,094	43	8		1		2		3	5
Tuscaloosa, Ala	10,824	7	1						3	
Utica, N. Y	89,572	30			10		2		2	3
Vallejo, Cal	13,803	15								
Walla Walla, Wash	26,067						2			
Waltham, Mass	31,011	17					4		2	1
Washington, D. C	369,282	252	4	1	2		4		17	18
Waterbury, Conn	89,201	4	7	1	3		6		3	3
Watertown, Mass	15,188	3	1				1		2	
Watertown, N. Y	30,404	6		1						1
Watervliet, N. Y	15,622	3								
Wausau, Wis	19,666	7			1					
Westfield, Mass	18,769	17	3	1			7			4
West Hoboken, N. J	44,356	12	2						2	
West New York, N. J	19,613	3	3	1					1	
West Orange, N. J	13,964	3	1						1	
Wheeling, W. Va	43,657	14								
White Plains, N. Y	23,331	5	1					1	1	1
Wichita, Kans	73,597	23	1							
Wilkes-Barre, Pa	78,334		1		1		4			
Williamsport, Pa	34,123		3							
Wilmington, Del	95,369	55	1				1			
Wilmington, N. C	30,400	16	1						2	
Winchester, Mass	10,812	5								
Winona, Minn	[1] 18,583	10								1
Winston-Salem, N. C	33,136	17								
Winthrop, Mass	13,105		1						2	
Woburn, Mass	16,076	8								
Worcester, Mass	166,106	86	5		13				4	8
Yonkers, N. Y	103,066	41	4				2			4
York, Pa	52,770		1		1				4	
Youngstown, Ohio	112,282	61	8		5		2		2	1
Zanesville, Ohio	31,320	14	1				1			

[1] Population Apr. 15, 1910.

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FOREIGN.

AUSTRALIA.

Influenza—Melbourne.

Influenza was reported present at Melbourne, State of Victoria, Australia, January 25, 1919.

BRAZIL.

Influenza—Santos.

During the two weeks ended November 10, 1919, 544 fatal cases of influenza were notified at Santos, Brazil. (Population about 96,000.)

CHINA.

Plague—North China.

According to press information received from Shanghai, China, under date of December 20, 1918, bubonic plague was prevalent in the Provinces of Fengtien and Kirin, North China.

PARAGUAY.

Influenza—Asuncion.

Epidemic influenza has been reported as having been present at Asuncion during the four weeks ended December 13, 1918. The greatest number of deaths from all causes notified at Asuncion during the four weeks of influenza prevalence, as occurring on any one day, was 42. The average number of deaths for the four-week period was 38, or a total of 1,064 deaths, making a rate of 13.3 per 1,000 in the estimated population of 80,000. The normal death rate of Asuncion per day from all causes during the year 1917 was slightly less than five persons.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Feb. 7, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Calcutta	Nov. 24-30	.....	56	Report for week ended Nov. 23, 1918, missing.
Philippine Islands:				
Provinces	.....	.....	.....	Dec. 8-14, 1918: Cases, 39; deaths, 157.
Bataan	Dec. 8-14	4	4	
Batangas	....do	14	11	
Bulacan	....do	6	4	
Cavite	....do	43	30	
Ilocos Sur	....do	1	.....	
Iloilo	....do	35	25	
Laguna	....do	1	3	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Feb. 7, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Continued.				
Provinces—Continued.				
Misamis	Dec. 8-14	22	21	
Pampanga	do	1	1	
Pangasinan	do	72	49	
Tayabas	do	7	7	
Union	do	1	1	
Zamboanga	do	1	1	
Manila	Dec. 15-21	4	1	
Provinces				Dec. 15-21, 1918: Cases, 229; deaths, 151.
Albay	Dec. 15-21	1	1	
Bataan	do	2	2	
Batangas	do	8	6	
Bohol	do	2	1	
Bulacan	do	14	10	
Cavite	do	30	25	
Cebu	do	41	20	
Ilocos Sur	do	4		
Iloilo	do	10	7	
Laguna	do	3	1	
Pangasinan	do	81	62	
Samar	do	8	1	
Tayabas	do	8	4	
Zamboanga	do	17	11	

PLAGUE.

China:				
Amoy	Nov. 24-Dec. 8			Present.
Chungking	Dec. 1-7			Present.
Ecuador:				
Guayaquil	Dec. 1-15	4		
India				Nov. 10-16, 1918: Cases, 1,669, deaths, 1,422.

SMALLPOX.

Algeria:				
Algiers	Dec. 1-31		1	
Canada:				
New Brunswick—				
Campbellton	Jan. 5-11	1		
Nova Scotia—				
Bicbee	Jan. 10			Present.
Halifax	Jan. 12-18	15		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	do	3		
Quebec—				
Montreal	do	3		
Pasbebiac	Jan. 12-18	1		
China:				
Amoy	Nov. 25-Dec. 8			Present.
Foochow	Nov. 24-Dec. 13			Do.
Chosen:				
Chemulpo	Nov. 1-30	2		
Denmark:				
Copenhagen	Dec. 1-14	6		
India:				
Calcutta	Nov. 24-30		1	
Japan:				
Kobe	Dec. 8-14	48	7	Present Jan. 24, 1919.
Panama:				
Colon	Jan. 5-11	1		
Portugal:				
Lisbon	Nov. 10-16	186		
Siberia:				
Vladivostok	Nov. 1-30	4		

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Indo-China:				
Anam	Aug. 1–31	5	5	
Cambodia	do	98	71	
Cochin-China	do	110	89	
Saigon	Oct. 7–Nov 10	18	12	
Tonkin	Aug. 1–31	1		
Java:				
East Java				Oct. 7–21, 1918: Cases, 109; deaths, 94.
Surabaya (district)	Oct. 7–28	92	75	
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 1,389; deaths, 867.
Samarang	Sept. 25–Oct. 16	120	111	
West Java				Oct. 2–Nov. 6, 1918: Cases, 212; deaths, 123.
Batavia	Oct. 2–Nov. 6	161	95	
Mesopotamia:				
Bagdad	Oct. 11–18	8		
Philippine Islands:				
Manila	Nov. 3–9	28	16	
Do	Nov. 17–Dec. 7	25	16	
Provinces				Nov. 2–9, 1918: Cases, 511; deaths 417. Nov. 17–Dec. 7, 1918: Cases, 578; deaths, 423.
Bataan	Nov. 17–Dec. 7	31	25	
Batangas	Nov. 2–9	156	141	
Do	Nov. 17–Dec. 7	59	43	
Bohol	Nov. 2–9	19	17	
Do	Nov. 17–30	10	4	
Bulacan	Oct. 27–Nov. 2	5	6	
Do	Nov. 17–Dec. 7	7	5	
Cavite	Oct. 27–Nov. 2	38	28	
Do	Nov. 17–Dec. 7	70	48	
Iloilo	Oct. 27–Nov. 2	9	6	
Do	Nov. 17–Dec. 7	25	19	
Laguna	Oct. 27–Dec. 7	9	3	
Mindoro	Nov. 24–30	4	5	
Misamis	Oct. 27–Nov. 2	6	5	
Do	Nov. 17–23	18	5	
Oriental Negros	Nov. 2–9	10	8	
Do	Nov. 17–Dec. 7	6	6	
Pampanga	Nov. 24–Dec. 7	3	3	
Pangasinan	Nov. 2–9	236	192	
Do	Nov. 17–Dec. 7	113	100	
Rizal	Oct. 27–Nov. 2	3	1	
Do	Nov. 24–30	16	8	
Sorsogon	Nov. 17–23	8	4	
Tayabas	Nov. 2–9	7	4	
Do	Nov. 17–Dec. 7	28	16	
Union	Nov. 2–Dec. 7	15	11	
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17–Aug. 21	1,943	1,455	In civil hospitals. In military hospitals, July 5–Aug. 21, 1918: Cases, 884; deaths, 783.

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Caracas	Dec. 30	1		

SMALLPOX.

Algeria:				
Algiers	Oct. 1–31	1		
Canada:				
New Brunswick—				
Campbellton	Dec. 22–28	1		
St. John	Nov. 8–14	3		
Nova Scotia—				
Bear River	Dec. 29–Jan. 4			Present.
Digby	do			Do.
Halifax	Dec. 7–28	10		
Do	Jan. 5–11	15		
Middleton	Dec. 29–Jan. 4			Do.
Sydney	Jan. 5–11	1		
Ontario—				
Ottawa	Jan 12–18	4		
Quebec—				
Montreal	Jan. 24–Dec. 21	2		
Do	Jan. 12–18	9		
Quebec	Dec. 15–21	1		
Do	Dec. 29–Jan. 4	1		
Canal Zone:				
Colon	Dec. 15–21	1		
Do	Dec. 29–Jan. 4	1		
China:				
Amoy	Oct. 13–Nov. 26			Do.
Canton	Nov. 17–23			Do.
Chungking	Nov. 10–30			Do.
Nanking	Dec. 1–7			Do.
Denmark:				
Copenhagen	Nov. 9–23	5		
India:				
Bombay	Aug. 18–Nov. 9	12	3	
Calcutta	Sept. 29–Nov. 9		6	
Karachi	Sept. 29–Oct. 5	1	1	
Madras	Oct. 5–Nov. 23	29	25	
Rangoon	Oct. 29–26	1	1	
Indo-China:				
Anam	Aug. 1–31	29	8	
Cambodia	do	78	40	
Cochin-China	do	97	27	
Saigon	Oct. 7–20	13	3	
Tonkin	Aug. 1–31	5		

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With the increasing recognition by health authorities of the significance of mental disease as a health problem, there is a growing demand for assistance in the formulation of a program of practicable control and preventive measures which can be inaugurated by health administrators. The reader may, therefore, be interested in studying the following program of activities which the United States Public Health Service plans to carry on as rapidly as funds become available for such purpose. Such a program should take into consideration—

A. The most effective means by which the several Government agencies can cooperate in studies and investigations of mental hygiene.

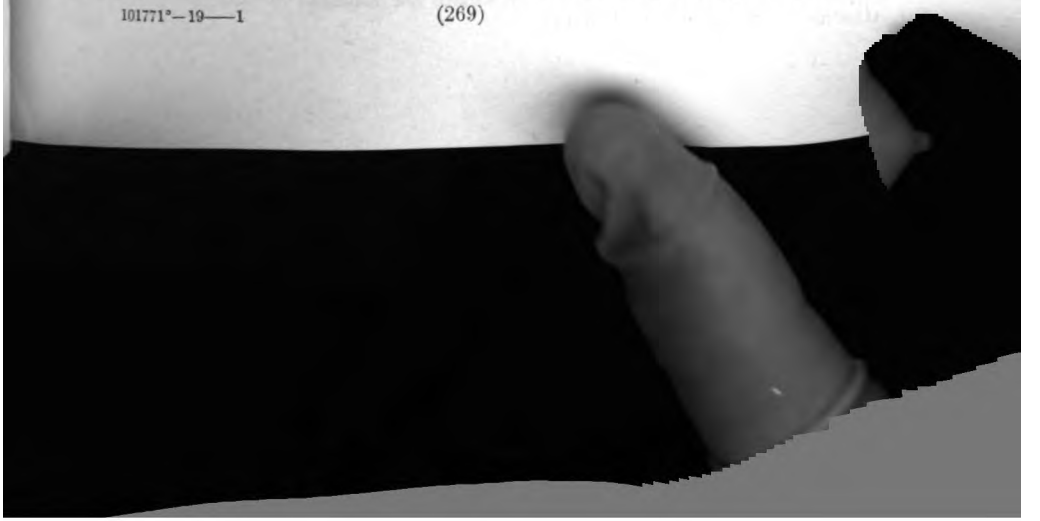
B. The problems of better care and treatment of the insane, mental defective, and epileptic.

C. Measures for the prevention of mental disorders.

So far as these considerations are concerned the studies and investigations already made by the Public Health Service indicate the following activities as desirable and practicable:

A. Cooperation With Other Government Agencies.

1. In addition to the duties prescribed by law as related to the mental examination of arriving aliens, cooperation with the Department of Labor (*a*) to establish a school for the training of medical



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officers as mental hygienists, (*b*) to provide facilities for training nurses and assistants for duty in mental hygiene work, and (*c*) to investigate the care and treatment of insane aliens confined under immigration laws in public and private institutions at Government expense.

2. Cooperation with other bureaus of the Treasury Department in the mental examination of coastwise pilots, locomotive engineers, and train dispatchers as a safeguard to the traveling public.

3. Cooperation with other departments or bureaus of the Government to devise practical methods for the mental examination of civil employees of the Government with a view to determine their fitness for different occupations.

4. Cooperation with the Department of the Interior in the study and prevention of insanity and mental deficiency among the wards of the Government, such as the Indians, Esquimaux, and other primitive races for which the Government is responsible.

5. Cooperation with the Bureau of Education in the revision of educational methods from the standpoint of mental hygiene.

6. Cooperation with the Bureau of Education in devising practical plans for the establishment of special classes for the training of feeble-minded and delinquent children.

7. Cooperation with State departments of justice and other agencies to secure (*a*) the adoption of a model law providing for the early treatment of mental disorders, (*b*) the enactment of a model commitment law, and (*c*) the establishment of psychiatric pavilions in general hospitals.

8. Cooperation with Federal and State departments of justice to secure the establishment of psychiatric clinics in connection with the courts to determine the mental status of criminals, dependents, and delinquents appearing before the court.

B. Prevention.

1. Cooperation with State and local agencies to secure the adoption of a law making certain types of mental disorders reportable to the health authorities.

2. Reviewing and publishing State laws of commitment of the insane and feeble-minded.

3. Cooperation with the State and other agencies to determine the prevalence of the insane, feeble-minded, alcoholics, and epileptics.

4. Investigating the prevalence and the care and treatment of the insane, epileptics, feeble-minded, criminal, and dependent classes confined in institutions in Alaska and in the insular possessions.

5. Compiling a national reference index of the literature on mental hygiene.

6. Investigating mental status in relation to certain constitutional diseases and drug addiction.

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7. Cooperation with the industrial hygiene unit of the United States Public Health Service in the studies and investigations of the mental status of workmen as related to output, fitness for the job, protection from health and injury hazards, and permanence of employment.

8. Cooperation with the child hygiene unit of the service in the study and investigation of insanity in children and of the personality of the potentially insane.

9. Cooperation with the Division of Venereal Diseases in studies and investigations of the mental status of prostitutes and of the relation of venereal diseases to mental disorders.

THE TREATMENT OF SEWAGE FROM SINGLE HOUSES AND SMALL COMMUNITIES.[1]

By EARLE B. PHELPS, Professor of Chemistry, Hygienic Laboratory, United States Public Health Service.

The problem of the treatment and disposal of sewage from isolated homes and small institutions or communities, differs in certain important aspects from the allied problem of city sewage disposal. The composition and physical characteristics of the sewage are, by reason of its nature, somewhat unique. The rate of flow which is always more or less equalized in large systems becomes exceedingly variable in small domestic systems. The necessary available head or fall for the operation of works is generally lacking and pumping is expensive and generally out of the question. Large-scale works require intelligent supervision and more or less constant oversight, which, although not always provided, are at least reasonably possible without involving the project in an undue per capita expense. The small plant, on the other hand, to be entirely successful, must operate with a minimum of such oversight.

Large sums of money have, in the aggregate, been spent in developing sewage treatment methods for the disposal of city sewage, an expenditure which has been amply justified in the resulting economy in design. On the other hand, small works have been designed upon the basis of the general principles, developed by these studies, upon sewages of different types, so that it has been necessary to allow wide margins of safety and to recognize many serious shortcomings, or even failures, in the result. It has seemed important, therefore, to investigate the matter of small disposal installations with the same degree of thoroughness and scientific control that has hitherto been employed in the investigation of city sewage.

[1] The investigations which are briefly described in this preliminary paper were carried out, under the writer's supervision, by Sanitary Engineer Leslie C. Frank and Assistant Sanitary Engineer C. P. Rhynus during the years 1914-1917. Messrs. Frank and Rhynus have prepared an extensive report embodying the complete results of the investigation, publication of which it has been necessary to delay on account of the war. The present preliminary paper contains a brief outline of the investigation, and is submitted at this time in order that the important conclusions may be made available pending the publication of the complete report.

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The experiments were made at two stations, one located at Chevy Chase, Md., and the other on the grounds of the Hygienic Laboratory, Washington. The Chevy Chase plant was located upon an existing private sewer with which some 25 houses were connected. The water supply of the community was from individual driven wells, but most of the houses were equipped with hand or power-driven pumps and a complete running water and modern plumbing system. The situation was, therefore, somewhat typical of situations commonly existing in small towns and frequently in rural districts.

At the Hygienic Laboratory plant sewage was obtained from the nurses' home of the Naval Hospital, which, by reason of an abundant available supply of city water, was somewhat more representative of institutional and small community conditions. The aim has been to confine the studies to a set of conditions commonly met with and to obtain a somewhat general solution as independent as possible of local variables. To this end it will be noted that the devices recommended are capable of exact duplication in any part of the country. This can not be said of processes that utilize the natural soil or artificial beds of stone. To this same end, also, the sewage load has been worked out on a per capita basis and special attention has been given to the variation in permissible loading that accompanies variation in per capita water consumption. The most conspicuous residual variable is that of climatic conditions, and the results must be interpreted with proper regard for that particular factor. With this single exception and with proper appreciation of an allowance for the limitations of the experimental method, it may properly be anticipated that the recommendations that have resulted from this study may be adopted for similar situations elsewhere with every assurance that they are quite applicable to the general situation which they are designed to cover.

The character of the sewages experimented with is shown in Table I, in which the average analyses of the sewages of five small Massachusetts communities have been incorporated for comparison. These latter have been compiled from Metcalf and Eddy.[1]

TABLE I. *Analyses of crude sewage. General average values.*

From—	Gallons per capita.	Parts per million.				Grams per capita per day.			
		Nitrogen.		Total solids.	Oxygen demand.[2]	Nitrogen.		Total solids.	Oxygen demand.[2]
		Ammoniacal.	Organic.			Ammoniacal.	Organic.		
Hygienic Laboratory plant	100	7.9	20.4	981	121	3.0	7.7	372	46
Chevy Chase plant	21	48.0	65.0	1,360	263	3.8	5.2	108	21
Small Massachusetts communities	80	27.2	18.0	600	.....	7.9	5.5	183	...

[2] 24-hour, 20°, biochemical oxygen demand. [1] American Sewage Practice, Vol. II, p. 182.

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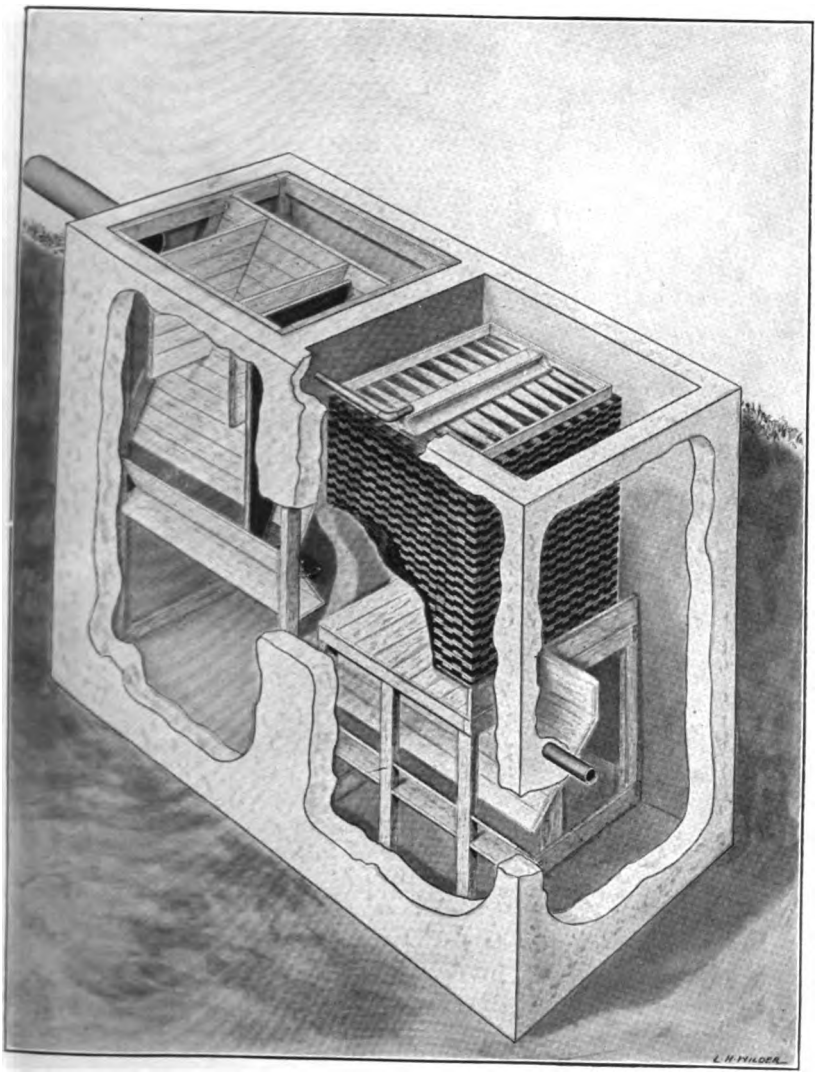

Fig. 1.

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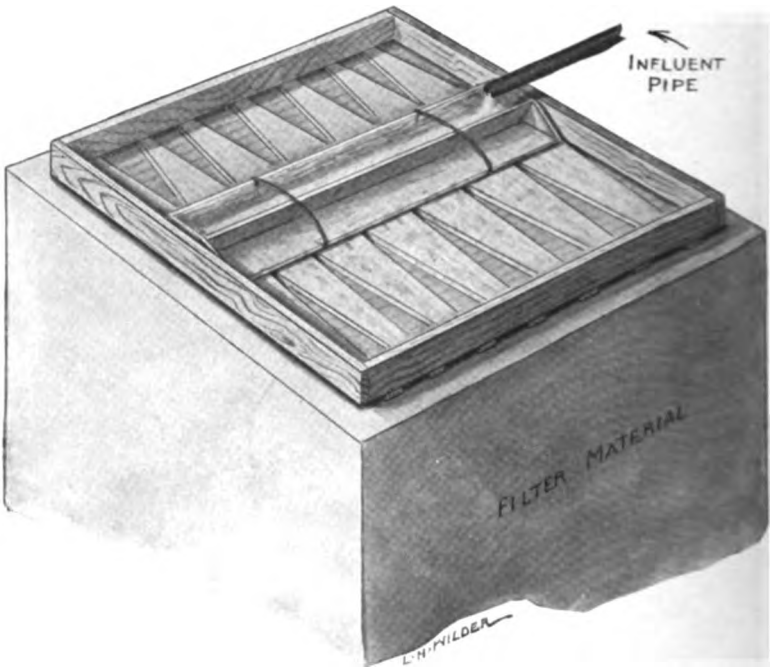

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Fig. 2.—Sewage distributor; tipper and tray board, converging boards.

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Experiments with preliminary tank treatment were confined to the biolytic tank and the Imhoff tank. The latter has been found particularly well adapted to the special existing requirements. An average removal of 91 per cent of the solids capable of settling was obtained with the Chevy Chase sewage, while with the weaker sewage at the Hygienic Laboratory the corresponding value was 97 per cent. The period of detention was naturally exceedingly variable, but averaged between four and six hours. The sludge accumulation amounted to 2 cubic feet and 3 cubic feet per capita per annum, respectively. Upon the basis of the design which has been worked out sludge removal from these tanks will be required not oftener than twice each year, and possibly not oftener than once each year. The sludge was well digested and inoffensive. It has valuable properties as a fertilizer and with proper restrictions may be so utilized.

Experiments were made with sand filters in order to determine the most advantageous methods of construction and operation under the special conditions imposed. It was found that with moderately coarse sand having an effective size of 0.35 mm. the area required per capita varies with the dilution of the sewage. For the Chevy Chase sewage, with a per capita flow of 20 gallons per day, about 30 square feet of superficial sand area per capita are required. For the Hygienic Laboratory sewage, at 100 gallons per capita per day, a corresponding area of 45 square feet is necessary. Sand layers of 24 inches in depth were found entirely satisfactory. Filter beds should be covered to prevent the growth of vegetation during the summer, and in the colder climates to prevent freezing during the winter. Inspection is required about once a month and raking of the surface about four times each year. A dosing chamber provided with an automatic siphon is an essential adjunct. The chamber should be so dimensioned as to provide a minimum depth of dose of 1 inch over the entire area.

Experiments with trickling filters comprised studies of distributors and studies of filter material. In view of the important results that have been obtained with one particular type of mechanism it will not be necessary to describe these experiments in detail. It has been found that the lath filter developed and described by Nasmith,[1] in combination with a tipping distributer such as has been frequently used in experimental work, possesses advantages over all other types of sewage treatment which merit a complete description of this device. The filter proper, which is shown in figure 1, is built up of layers of ordinary laths, the laths of adjacent layers lying at right angles to one another and those of each layer being parallel and spaced

[1] Journal Royal Sanitary Institute XXXVII, 1916.

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with clear openings of 3 inches. Closer spacing, down to ¾ in yielded less satisfactory results. The laths of each layer are also spaced that they come over the center of the open space in the sec layer below. A filter depth of 6 feet yields an effluent of high deg of oxidation, and one of 3½ feet yields an effluent sufficiently oxidi to satisfy the requirements of most situations. A total filter volu of 8 cubic feet per capita is required.

The details of the distributor which has been most satisfact are shown in figure 3, while its method of operation is best show figure 1. As each compartment becomes nearly full, the devic overbalanced and tips, rocking upon the supporting knife ed The sewage passes to the tray, the force of the impact being suffic

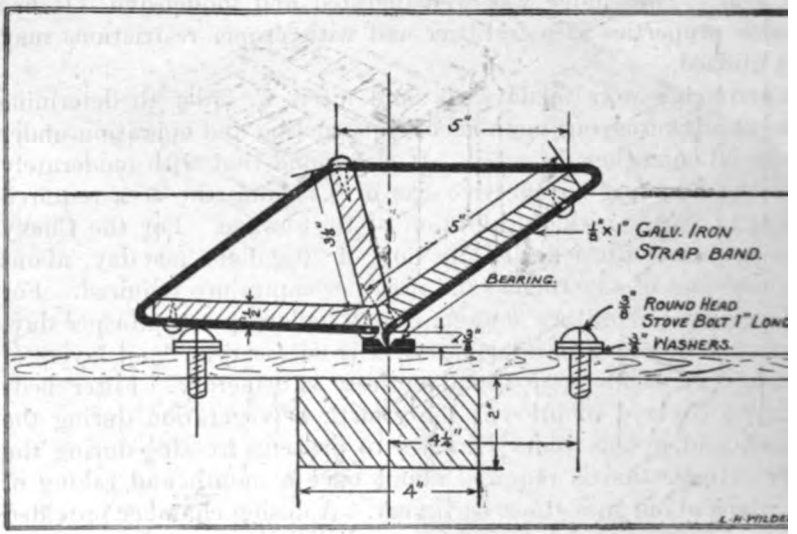

FIG. 3.

to cause it to flow as a wave to the ends of the distributor boa These boards are so tapered that the distribution over the entire is rendered quite uniform.

The performance of this filter is much superior to that of a g trickling filter of stone, and in 6-foot depths, with subsequent s mentation, is approximately equal to that of a well-operated s filter 2 feet in depth. This satisfactory result is attributed in p to the well-nigh perfect distribution of sewage over the surface, in part to the construction of the filter itself, providing, as it d a large area of horizontal surface over which the sewage passes slo in exceedingly thin films. That this latter advantage is a real is indicated by the comparison of results of lath and stone trickl filters operated under identical conditions as to depth and manne distribution. This is shown in Table II.

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TABLE II.—*Average performance of lath and stone filters.*

	Lath.	Stone.
Rate (m. g. a. d.)	2.00	3.12
Relative stability of effluent (per cent)	93	67
Reduction of biochemical oxygen demand (per cent)	89	81
Reduction of organic nitrogen (per cent)	55	29
Nitrogen oxidized (p. p. m.)	4.7	4.0

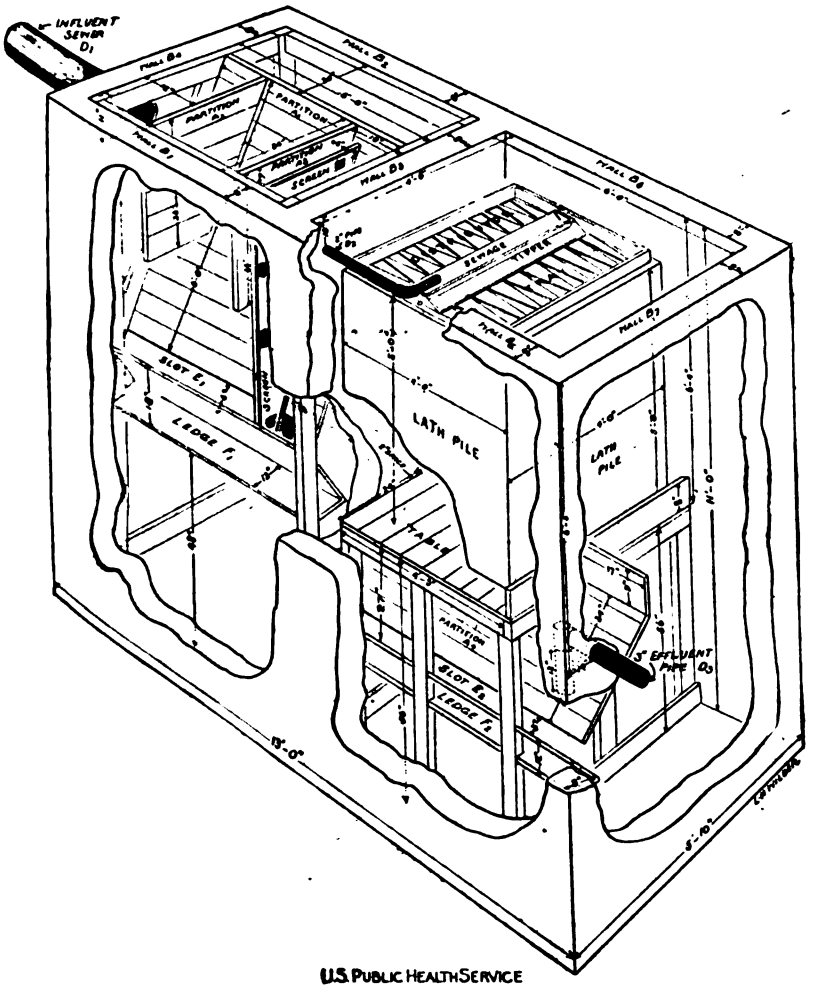

FIG. 4.—Imhoff tank and lath filter plant for 10 people.

The device fulfills in the most practical way the requirements of satisfactory operation with minimum oversight. There is apparently no tendency toward clogging or deterioration in the filter itself. The rocking distributor might be thought to add a considerable element of uncertainty, but, with the contact of moving parts being

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confined to the two knife edges, which, by their continuous movement, are necessarily kept clean, no difficulty whatever has been experienced on this score. In fact, since the completion of the experiments the plant at the laboratory station has been running for over a year with inspection not more frequent than once in three months, and only on one occasion was there any necessity for attention. At that time the rocker had entirely left its seat, and deliberate interference by boys of the neighborhood was clearly indicated.

Several complete designs involving preliminary and final Imhoff tanks together with trickling filter have been worked out for populations of from 6 to 120 people. Figure 1 gives the general lay-out which is considered most satisfactory and figure 4 gives the actual dimensions of this plant for a population of 10 people. For smaller populations some reduction in the size of the preliminary Imhoff tank is permissible, but the filter itself could hardly, with advantage, be reduced in size. The general course of the sewage through the plant is plainly indicated. Entering from the main sewer it passes first into a grease trap, thence under the partition A–2, through the main sedimentation chamber, under partition A–3, through the wire screen to the 2-inch outlet pipe which discharges directly into the sewage tipper. It is then distributed over the surface of the filter and flows through the filter to the tight table below, which fits the concrete structure snugly at all points except for the 2 by 24 inch space shown. Through this space it reaches the lower Imhoff tank similar in all respects to the preliminary tank except for the absence of partition baffles. Passing through this tank, it discharges at the effluent pipe D–3. During the passage of the sewage through the Imhoff tanks, the suspended solids are deposited upon the sloping partition from which they slide by gravity, ultimately reaching the lower or sludge compartment. Here digestion takes place, the gases and scum rising along the underside of the sloping partition to the vent chamber. Through this chamber the sludge is removed at necessary intervals. It is estimated that the cost of materials and labor for a plant of this capacity will be about $250. The degree of purification effected is sufficient for all purposes except where the discharge is directly into a water supply. In such a case chemical disinfection of the effluent is recommended in addition. In the northern sections of the country it will be desirable to provide heavy plank covers for protection against winter weather. The plant will operate without nuisance, and, with a monthly inspection and semiannual or annual removal of sludge from the tanks, will operate continuously without further attention.

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VACCINATION AGAINST SMALLPOX.

ILLINOIS SUPREME COURT DECIDES THAT LOCAL BOARD OF HEALTH MAY EXCLUDE UNVACCINATED CHILDREN FROM SCHOOL DURING SMALLPOX EPIDEMIC.

The right to temporarily exclude unvaccinated pupils from school while smallpox is unduly prevalent in a community is upheld in a recent decision of the Supreme Court of Illinois.[1]

Smallpox became epidemic in Granite City, and the local board of health to prevent the further spread of the disease passed a resolution excluding all children from the public schools for a period of two weeks unless they had recently been vaccinated or unless they produced a certificate that they had been successfully vaccinated within the past five years or had had smallpox. Suit was brought to enjoin the authorities from preventing the attendance at school of several pupils who were unvaccinated.

The court dismissed the suit, stating that while school directors and boards of education have no authority to exclude children from school simply because they refuse to be vaccinated, yet "the resolution of the board of health was reasonable in view of the fact that smallpox was epidemic and the disease likely to spread from the many cases then existing in the city."

The court further said:

"As it was the duty of the board of health to enforce such reasonable rules and regulations as would stamp out the epidemic and promote the public health and the resolution seemed well calculated to accomplish that purpose, and as a public necessity existed for such action, the board of health must be held to have acted legally in passing the resolution and the school board in enforcing it and requiring vaccination as a condition to pupils entering the schools. The exercise of such authority by the board of health and the school board finds ample authority in the police power of the State when such a necessity arises, as is shown in this case, and no constitutional rights of appellants have been violated. * * * The right to enjoy school and other privileges recognized by our law must be so used and enjoyed as not to expose other people unnecessarily to dangerous diseases or contagions. The police power is broad enough to protect all citizens against such exposure, and it is not an unreasonable requirement to prevent children from having the benefits of school unless vaccinated, etc., under such conditions as existed in Granite City when the resolution of the board of health was passed, and particularly when such exclusion was only for the period of two weeks and with the privilege to the children to remain unvaccinated by remaining out of school for such time."

[1] *Hagler et al. v. Larner et al.*, 120 N. E., 575.

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recognized.

Illegitimacy.

In the whole of the German Empire the proportion of illegitimate births is between 9 and 10 per cent. In certain districts the rate is much higher. On the outbreak of the war the care of foster children was interfered with in many instances by the mobilization of the doctors appointed to look after them. As the war progressed, however, the various forms of guardianship over illegitimate children which had been instituted before the war appear to have been exercised with greater closeness and care than formerly, so that, on the whole, there was an improvement in the lot of the illegitimate children in Germany. The imperial maternity grants were extended to unmarried mothers provided proof was forthcoming that the father was serving in the army. A letter to the mother was considered sufficient evidence.

Institutional Care of Children.

In connection with the controversy so often occurring regarding institutional versus home care of foster children, it may be of interest to observe that in Germany, while there has been a considerable development of infant welfare work on the modern lines of caring

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	154,759	86	29.0	30	10.1
	453,481	84	9.7	.....	.....
	383,442	102	13.9	.....	.....
	119,215	60	26.2	17	7.4
	428,684	149	18.1	50	6.1
	154,865	50	16.8	.....	.....
	382,273	243	33.1	125	17.1
	5,215,879	2,448	24.5	1,212	12.1
Oakland, Cal	214,206	83	20.2	.....	.....
Omaha, Nebr	180,264	44	12.7	.....	.....
Philadelphia, Pa	1,761,371	784	23.2	308	9.1
Pittsburgh, Pa	593,303	333	29.3	174	15.3
Portland, Oreg	.....	111	.....	50	.....
Providence, R. I	263,613	105	20.8	35	6.9
Richmond, Va	160,719	67	21.7	23	7.5
Rochester, N. Y	264,856	80	15.7	12	2.4
St. Louis, Mo	779,951	234	15.6	75	5.0
St. Paul, Minn	257,699	61	12.3	.....	.....
San Francisco, Cal	478,530	201	21.9	59	6.4
Seattle, Wash	.....	81	.....	27	.....
Spokane, Wash	.....	31	.....	.....	.....
Syracuse, N. Y	161,404	59	19.1	18	5.8
Toledo, Ohio	262,234	84	16.7	16	3.2
Washington, D. C	401,681	179	23.2	60	7.8
Worcester, Mass	173,650	55	16.5	23	6.9

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CAMP BEAUREGARD ZONE, LA.

	Cases.
Influenza:	
Alexandria	6
Pineville	4
Rural district	13
Malaria:	
Alexandria	3

CAMP BOWIE ZONE, TEX.

Fort Worth:	
Chicken pox	4
Gonorrhea	11
Influenza	9
Measles	1
Mumps	1
Pneumonia	11
Scabies	6
Smallpox	1
Syphilis	12
Trachoma	1

CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	
Influenza	61
Scarlet fever	1
Tuberculosis	1

CAMP DEVENS ZONE, MASS.

Ayer:	
Influenza	1
Lancaster:	
Whooping cough	10
Lunenburg:	
Influenza	1
Measles	3
Mumps	1

CAMP DIX ZONE, N. J.

Diphtheria:	
Pemberton Borough	1
Influenza:	
Pemberton Township	4
Pneumonia:	
Pemberton Township	3

Des Moines:	
Diphtheria	[illegible]
Gonorrhea	[illegible]
Influenza	[illegible]
Mumps	[illegible]
Scarlet fever	[illegible]
Smallpox	1

CAMP EBERTS ZONE, ARK.

Gonorrhea:	
England	1
Influenza:	
Cabot	1
Carlisle	1
Ward	4
Pneumonia:	
Cabot	1
Tomberlin	1
Scarlatina:	
Jacksonville	2

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chicken pox	1
Gonorrhea	9
Influenza	6
Measles	2
Mumps	1
Pneumonia	4
Syphilis	1

CAMP FUNSTON ZONE, KANS.

Influenza:	
Manhattan	4
Measles:	
Junction City	1
Mumps:	
Manhattan	3
Pneumonia:	
Manhattan	4
Scarlet fever:	
Junction City	3
Manhattan	2

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CAMP M'CLELLAN ZONE, ALA.

Anniston:	
Chancroid	1
Chicken pox	1
Gonorrhea	5
Influenza	8
Mumps	5
Pneumonia	2
Syphilis	3
Tuberculosis	1
Whooping cough	1
Jacksonville:	
Malaria	1

CAMP MERRITT ZONE, N. J.

Chicken pox:	
Englewood	3
Influenza:	
Bergenfield	5
Dumont	2
Englewood	22
Tenafly	8
Pneumonia:	
Englewood	4
Tenafly	1

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Colbert County:	
Measles	2
Lauderdale County:	
Chicken pox	1
Measles	8
Mumps	2

Measles:	
Little Rock	6
North Little Rock	3
Meningitis:	
Little Rock	1
Mumps:	
Little Rock	3
North Little Rock	1
Pneumonia:	
Little Rock	9
Scott	2
Scarlet fever:	
Little Rock	6
Syphilis:	
Little Rock	2
Tuberculosis:	
Little Rock	7
Typhoid fever:	
Little Rock	1

CAMP POLK ZONE, N. C.

Cerebrospinal meningitis:	
Durham	1
Chicken pox:	
Durham	1
Raleigh	1
Diphtheria:	
Durham County	1
German measles:	
Raleigh	1
Influenza:	
Durham	9
Durham County	1
Raleigh	156

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TIDEWATER HEALTH DISTRICT, VA.—continued.

Newport News—Continued.	Cases.
Syphilis	15
Tuberculosis, pulmonary	2
Whooping cough	1
Phoebus:	
Diphtheria	2
Tuberculosis	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chancroid	1
Diphtheria	2
Gonorrhea	16
Influenza	16
Measles	1
Mumps	3
Pneumonia	7
Syphilis	7
Tuberculosis	3

CAMP UPTON ZONE, N. Y.

Chicken pox:	
Brook Haven	2
Diphtheria:	
Riverhead	4

CAMP UPTON ZONE, N. Y.—continued.

Pneumonia:	Cases.
Brook Haven	1
Patchogue	1
Riverhead	1

CAMP WADSWORTH ZONE, S. C.

Spartanburg:	
Gonorrhea	6
Influenza	2
Measles	1
Mumps	1
Smallpox	1
Tuberculosis	1

WILMINGTON SANITARY DISTRICT, N. C.

East Wilmington:	
Pneumonia	1
Wilmington:	
Chicken pox	3
Diphtheria	2
Gonorrhea	2
Influenza	4
Mumps	2
Pneumonia	1
Scarlet fever	1
Tuberculosis	3
Typhoid fever	1

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended January 31, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week
Annual admission rate per 1,000 (all causes)	1,033.23	1,012.8
All troops in United States	1,154.34	1,262.1
American Expeditionary Forces	982.84	898.4
Annual admission rate per 1,000 (diseases only)	831.44	853.6
All troops in United States	984.45	1,085.9
American Expeditionary Forces	767.59	780.5
Noneffective rate per 1,000 on day of report	50.77	52.7
All troops in United States[1]	49.97	53.4
American Expeditionary Forces	51.10	52.4
Annual death rate per 1,000 (all causes)	13.47	14.8
All troops in United States[1]	12.01	14.0
American Expeditionary Forces	14.07	14.7
Annual death rate per 1,000 (diseases only)	7.98	10.0
All troops in United States[1]	10.89	13.6
American Expeditionary Forces	6.72	7.5

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

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Cases of special diseases reported during the week ended Jan. 31, 1919.

Camp.	Pneumonia.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Non-effective rate per 1,000 on day of report.
			Total.	New infections.						
Beauregard	6	2	28	.....	.....	2	.....	.....	1,791.72	57.68
Bowie	12	.....	44	22	2	14	.....	.....	1,741.82	73.94
Cody	.....	.....	2	.....	.....	.....	.....	.....	281.84	34.98
Fremont	.....	.....	2	.....	3	.....	.....	.....	705.76	192.92
Greene	.....	.....	19	.....	5	2	.....	.....	1,256.52	64.75
Hancock	9	.....	43	6	15	.....	.....	2	1,104.92	83.88
Kearny	2	.....	28	3	17	.....	1	.....	700.45	24.65
Logan	5	1	11	4	12	7	2	.....	635.58	36.37
MacArthur	1	.....	5	.....	7	.....	.....	1	1,062.61	64.49
McClellan	21	.....	7	1	13	.....	.....	.....	641.44	62.17
Sevier	4	.....	1	.....	1	.....	1	.....	702.84	47.99
Sheridan	3	.....	19	4	.....	2	.....	.....	771.26	34.70
Shelby	7	1	37	16	8	.....	.....	.....	1,825.95	75.41
Wadsworth	3	.....	2	.....	.....	1	.....	.....	439.94	35.33
Wheeler	1	.....	11	.....	3	.....	.....	.....	987.05	135.89
Custer	18	.....	12	7	.....	5	.....	2	777.59	41.08
Devens	10	.....	22	4	14	1	.....	3	618.73	60.94
Dix	5	.....	22	7	5	.....	.....	.....	1,154.60	87.77
Dodge	5	.....	11	7	7	2	.....	11	1,116.84	57.29
Kustis	.....	.....	3	.....	9	.....	.....	.....	961.69	60.10
Funston	8	.....	7	.....	6	1	.....	18	666.16	39.18
Gordon	5	.....	16	.....	31	1	.....	.....	1,700.89	71.74
Grant	9	.....	2	.....	21	12	.....	.....	691.89	60.60
Humphreys	13	.....	10	1	14	8	.....	.....	671.85	30.35
Jackson	17	.....	19	.....	55	2	1	.....	859.47	58.77
J. E. Johnston	.....	.....	12	.....	2	.....	.....	1	639.80	43.67
Henry Knox	1	.....	6	.....	.....	.....	1	1	1,512.91	27.36
Las Casas	.....	5	2	.....	.....	.....	.....	.....	1,001.32	47.80
Lee	6	.....	24	10	38	2	.....	4	1,046.19	66.45
Lewis	19	.....	25	5	9	2	.....	1	1,123.28	50.43
Meade	17	.....	16	6	3	.....	1	13	442.27	25.86
Pike	11	.....	7	.....	51	3	.....	2	1,272.26	79.37
Sherman	5	.....	5	.....	10	1	.....	.....	1,190.99	112.65
Taylor	9	.....	23	5	3	.....	2	2	1,032.87	89.89
Travis	14	.....	18	1	21	15	.....	.....	2,393.65	67.15
Upton	2	.....	14	4	2	5	1	.....	1,383.69	77.11
Northeastern Department	.....	.....	6	4	6	.....	.....	2	672.53	31.49
Eastern Department	3	1	21	8	31	.....	.....	.....	813.45	23.37
Southeastern Department	1	1	5	4	25	4	.....	.....	1,441.38	40.60
Central Department	.....	.....	3	.....	8	1	.....	.....	1,349.82	31.66
Southern Department	59	1	69	10	184	3	.....	4	1,439.96	54.14
Western Department	2	.....	5	3	33	.....	.....	.....	867.36	18.08
Aviation camps	23	.....	43	.....	70	1	.....	1	850.39	39.16
Ports of embarkation:										
Hoboken	21	.....	8	3	115	1	2	.....	1,699.46	144.47
Newport News	22	.....	109	1	42	2	2	1	1,869.53	63.28
Alcatraz Disciplinary Barracks	.....	.....	.....	.....	.....	.....	.....	.....	643.96	12.38
Leavenworth Disciplinary Barracks	.....	.....	.....	.....	.....	.....	.....	.....	1,808.25	43.46
Columbus Barracks	.....	.....	6	2	2	.....	.....	.....	2,940.17	44.04
Jefferson Barracks	1	.....	1	1	3	.....	.....	.....	1,112.69	50.64
Fort Logan	.....	.....	3	1	.....	.....	.....	.....	916.78	43.72
Fort McDowell	.....	.....	11	.....	.....	.....	.....	.....	1,259.00	33.89
Fort Sill	.....	.....	10	10	16	.....	.....	1	623.40	28.21
Fort Slocum	.....	.....	2	1	.....	.....	.....	.....	443.30	37.51
Fort Thomas	.....	.....	1	1	.....	.....	.....	.....	792.54	25.40
West Point	.....	.....	1	.....	.....	.....	.....	.....	333.72	15.16
Arsenals	5	.....	13	.....	17	13	.....	.....	901.08	41.33
Miscellaneous small stations	9	.....	15	.....	.....	6	.....	.....	735.01	29.26
Total	394	12	867	162	939	119	14	70	984.45	49.97

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Maine.—Anthrax: Island Falls 1. Diphtheria: Kittery 1, Friendship 2. Gonorrhea: Calais 1, Bath 2, Bangor 1, Portland 2, Island Falls 1, Lewiston 2, Biddeford 2, Jackman 1, Waterville 2. Scarlet fever: Norway 3, Portland 3. Smallpox: Frenchville 11, Guerette 6, Madawaska 8. Syphilis: Bangor 2, Hartland 1, Oldtown 1, Corinna 1, Lewiston 1, Portland 4, Auburn 1, Waterville 4. Tuberculosis: Reported in State, 5 cases. Influenza: Scattered cases 112.

Massachusetts.—Unusual prevalence. Diphtheria: Salem 13, Holyoke 10. Scarlet fever: Gloucester 9, Salem 8. Measles: Leominster 60.

Minnesota.—Smallpox (new foci): Blue Earth County, Mankato 1; Cass County, Pine River, 2; Clay County, Tausem Township, 1; Freeborn County, Bath Township, 1; Kanabec County, White Township, 2; Norman County, Twin Valley, 7, Waukon Township, 1; Flom Township, 63; Ottertail County, Perham, 1, Fergus Falls, 1; Rice County, Webster Township, 4; Rock County, Luverne Township, 1; St. Louis County, Duluth, 4; Scott County, Shakopee, 37. State totals: Syphilis 7, gonorrhea 76, chancroid 4.

New Jersey.—Influenza cases reported 1,789; pneumonia 36 cases. No unusual prevalence of other diseases.

New York.—Typhoid fever 21; scarlet fever 178, slight increase; diphtheria 267, increase of 73 over preceding week—Buffalo 106; smallpox 2, Albany 1, West Seneca 1; cerebrospinal meningitis 5, Albany 1, Elmira Heights 1, Buffalo 1, Amsterdam 1, Saratoga Springs 1; pneumonia 446. Voluntary reports: Syphilis 120; gonorrhea 19.

North Carolina.—Whooping cough 100, measles 85, diphtheria 20, scarlet fever 15, septic sore throat 3, smallpox 56, chicken pox 25, typhoid fever 8, epidemic meningitis 4, broncho-pneumonia 77, lobar pneumonia 44. Influenza by counties: Alamance 5, Ashe 19, Bertie 400, Chatham 3, Cleveland 87, Cumberland 83, Davidson 18, Gaston 10, Mitchell 75, Montgomery 1, Pitt 74, Stokes 9, Tyrrell 52.

Ohio.—Scarlet fever: Union Township (Mercer County) 13 cases, Kent 7 cases. Smallpox: Washington Court House 17 cases. Typhoid fever; 107 cases in State. Slight increase in influenza.

Oklahoma.—By counties. Logan: Influenza 85, pneumonia 4 (death 1). Lincoln: Influenza 35, pneumonia 2. Pottawatomie: Influenza 1, smallpox 2, measles 2, pneumonia 9. Sequoyah: Influenza 157, diphtheria 1, scarlet fever 2, smallpox 3, measles 7, chicken pox 6, tuberculosis 1, pneumonia 40 (deaths 9). Nowata: Influenza 82, pneumonia 12. Stephens: Influenza 75. Pittsburg: Influenza 83, pneumonia 5, smallpox 1, whooping cough 6. Latimer: Influenza 15, smallpox 1, meningitis 1. Noble: Influenza 11, pneumonia 1 (death 1), smallpox 7. Coal: Influenza 75, pneumonia 3, smallpox 25, diphtheria 1. Cleveland: Influenza 96, pneumonia 10 (deaths 2). Grady: Influenza 65, pneumonia 5. Creek: Influenza 17.

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Oregon.—Influenza: Portland 164 cases, 13 deaths; by counties—Clackamas 2, Deschutes 22, Hood River 2, Marion 1, Multnomah 2, Union 1, Wasco 20, Washington 5.

Vermont.—Influenza, 205 cases from 21 towns. No other unusual prevalence.

Virginia.—Smallpox: Charlotte County 4, Alexandria County 1, Smyth County 4, Norfolk County 1. Influenza: Reported in State, 325 cases.

Washington.—Influenza increasing throughout State.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 8, 1919.

	Cases.		Cases.
Camp Polk Zone, N. C.	1	Camp Zachary Taylor zone, Ky. and Ind.	1

State Reports for November and December, 1918.

Place.	New cases reported.	Place.	New cases reported.
Alabama (December):		California (November)—Continued.	
Calhoun County	1	San Francisco	3
Colbert County	1	Solano County	1
Jefferson County	1	Total	6
Talladega County	1		
Tuscaloosa County	3	Oregon (December):	
Total	7	Portland	1
California (November):			
Los Angeles County—			
Long Beach	1		
Los Angeles	1		

City Reports for Week Ended Jan. 25, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alexandria, La.	1	1	Medford, Mass.	1	.....
Baltimore, Md.	5	1	Milwaukee, Wis.	3	3
Birmingham, Ala.	.....	1	Nashville, Tenn.	1	1
Boise, Idaho.	2	.....	New Bedford, Mass.	.....	1
Boston, Mass.	.....	2	New Orleans, La.	1	.....
Buffalo, N. Y.	2	1	New York, N. Y.	9	4
Charleston, S. C.	1	.....	Omaha, Nebr.	2	1
Charleston, W. Va.	.....	1	Philadelphia, Pa.	1	1
Chicago, Ill.	6	2	Rahway, N. J.	.....	1
Detroit, Mich.	1	.....	St. Louis, Mo.	2	.....
Englewood, N. J.	.....	1	South Bend, Ind.	.....	1
Fort Scott, Kans.	1	1	Springfield, Mass.	.....	1
Indianapolis, Ind.	.....	1	Syracuse, N. Y.	.....	1
Kalamazoo, Mich.	1	.....	Topeka, Kans.	.....	1
Louisville, Ky.	.....	1	Wheeling, W. Va.	1	.....
Manchester, N. H.	1	1			

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 8, 1919.

	Cases.		Cases.
Camp Logan zone, Tex.	6	Camp Zachary Taylor zone, Ky. and Ind.	1
Camp McClellan zone, Ala.	1	Tidewater health district, Va.	4
Camp Sheridan zone, Ala.	2	Camp Travis zone, Tex.	1

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DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 8, 1919.

	Cases.
Camp Dix zone, N. J.	1
Camp Dodge zone, Iowa	5
Camp Gordon zone, Ga.	2
Gulfport health district, Miss.	1
Camp Humphreys zone, Va.	1
Fort Leavenworth zone, Kans.	4
Fort Oglethorpe zone, Ga. and Tenn.	1
Camp Polk zone, N. C.	1
Portsmouth and Norfolk County health district, Va.	Cas
Camp Sherman zone, Ohio	
Camp Zachary Taylor zone, Ky. and Ind.	
Tidewater health district, Va.	
Camp Travis zone, Tex.	
Camp Upton zone, N. Y.	
Wilmington sanitary district, N. C.	

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 299.

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 8, 1919.

	Cases.
Camp Bowie zone, Tex.	11
Camp Dodge zone, Iowa	4
Camp Eberts zone, Ark.	1
Fayetteville sanitary district, N. C.	9
Camp Gordon zone, Ga.	13
Gulfport health district, Miss.	4
Camp Jackson zone, S. C.	2
Fort Leavenworth zone, Kans.	1
Camp Lee zone, Va.	1
Camp Logan zone, Tex.	20
Camp McClellan zone, Ala.	5
Picric Acid Plant zone, Ga.	Cas
Camp Pike zone, Ark.	
Portsmouth-Kittery sanitary district, N. H and Me.	
Camp Sheridan zone, Ala.	
Camp Sherman zone, Ohio	
Camp Zachary Taylor zone, Ky. and Ind.	
Tidewater health district, Va.	
Camp Travis zone, Tex.	
Camp Wadsworth zone, S. C.	
Wilmington sanitary district, N. C.	

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 8, 1919.

	Cases.
Camp Beauregard zone, La.	28
Camp Bowie zone, Tex.	9
Charleston sanitary district, S. C.	61
Camp Devens zone, Mass.	2
Camp Dix zone, N. J.	4
Camp Dodge zone, Iowa	4
Camp Eberts zone, Ark.	6
Fayetteville sanitary district, N. C.	6
Camp Funston zone, Kans.	4
Gas and Flame School zone, Ga. and Ala.	65
Gerstner Field zone, La.	17
Camp Gordon zone, Ga.	75
Gulfport health district, Miss.	124
Camp Hancock zone, Ga.	10
Camp Humphreys zone, Va.	73
Camp Jackson zone, S. C.	99
Fort Leavenworth zone, Kans.	17
Camp Lee zone, Va.	33
Camp Lewis zone, Wash.	6
Camp McClellan zone, Ala.	Cas
Camp Merritt zone, N. J.	
Fort Oglethorpe zone, Ga. and Tenn.	
Picric Acid Plant zone, Ga.	
Camp Pike zone, Ark.	
Camp Polk zone, N. C.	
Portsmouth and Norfolk County health district, Va.	
Portsmouth-Kittery sanitary district, N. H and Me.	
Camp Sevier zone, S. C.	
Camp Sherman zone, Ohio	
Souther Field zone, Ga.	
Camp Zachary Taylor zone, Ky. and Ind.	
Tidewater health district, Va.	
Camp Travis zone, Tex.	
Camp Wadsworth zone, S. C.	
Wilmington sanitary district, N. C.	

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 8, 1919.

	Cases.
Camp Beauregard zone, La.	3
Gulfport health district, Miss.	10
Camp McClellan zone, Ala.	Cas
Camp Pike zone, Ark.	

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MALARIA—Continued.

State Reports for November and December, 1918.

Place.	New cases reported.	Place.	New cases reported.
Alabama (December):		California (November):	
Coffee County	1	Alameda County—	
Colbert County	1	Alameda	1
Henry County	1	Oakland	1
Houston County	6	Glenn County—	
Jefferson County	3	Orland	1
Lee County	1	Sacramento County—	
Mobile County	1	Sacramento	1
Pickens County	1	San Joaquin County	1
Tuscaloosa County	10	Tehama County—	
Wilcox County	1	Red Bluff	1
Total	36		6

City Reports for Week Ended Jan. 25, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alexandria, La	4	.....	New York, N. Y	.....	1
Charlotte, N. C	.....	1	Philadelphia, Pa	1	.....
Joplin, Mo	2	.....	Tuscaloosa, Ala	2	.....

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 8, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	1	Fort Oglethorpe zone, Ga. and Tenn	1
Camp Devens zone, Mass	3	Picric Acid Plant zone, Ga	6
Fayetteville sanitary district, N. C	2	Camp Pike zone, Ark	9
Camp Funston zone, Kans	1	Camp Polk zone, N. C	5
Gas and Flame School zone, Ga. and Ala	4	Portsmouth and Norfolk County health district, Va	13
Camp Gordon zone, Ga	1	Camp Sherman zone, Ohio	1
Camp Humphreys zone, Va	1	Camp Zachary Taylor zone, Ky. and Ind	9
Camp Jackson zone, S. C	4	Camp Travis zone, Tex	1
Camp Lewis zone, Wash	2	Camp Wadsworth zone, S. C	10
Camp Logan zone, Tex	7		
Muscle Shoals sanitary district, Ala	10		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 299.

PELLAGRA.

Alabama Reports for December, 1918.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Alabama—Continued.	
Bullock County	1	Mobile County	12
Clifton County	1	Montgomery County	2
Dallas County	1	Pickens County	1
Etowah County	4	Randolph County	1
Greene County	1	Talladega County	2
Hale County	1	Tuscaloosa County	10
Jefferson County	14	Total	53
Marengo County	2		

City Reports for Week Ended Jan. 25, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga	.....	2	Lynchburg, Va	.....	1
Charlotte, N. C	.....	1	Memphis, Tenn	.....	3
Dallas, Tex	.....	1	Raleigh, N. C	1	1
Houston, Tex	.....	1	Richmond Va	.....	1
Little Rock, Ark	.....	1			

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PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended February 8, 1919.

	Cases.
Camp Bowie zone, Tex.	11
Camp Dix zone, N. J.	3
Camp Eberts zone, Ark.	2
Fayetteville sanitary district, N. C.	4
Camp Funston zone, Kans.	4
Gas and Flame School zone, Ga. and Ala.	6
Gerstner Field zone, La.	1
Gulfport health district, Miss.	7
Camp Logan zone, Tex.	3
Camp McClellan zone, Ala.	2
Camp Merritt zone, N. J.	5
Picric Acid Plant zone, Ga.	5
Camp Pike zone, Ark.	11
Portsmouth and Norfolk County health district, Va.	3
Portsmouth-Kittery sanitary district, N. H. and Me.	1
Camp Sevier zone, S. C.	10
Souther Field zone, Ga.	3
Tidewater health district, Va.	1
Camp Travis zone, Tex.	7
Camp Upton zone, N. Y.	6
Wilmington sanitary district, N. C.	10

City Reports for Week Ended Jan. 25, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1		Louisville, Ky.	5	1
Albany, N. Y.	9		Lowell, Mass.	4	1
Alexandria, La.	1		Ludington, Mich.	1	1
Atlanta, Ga.	1	57	Lynn, Mass.	1	1
Baltimore, Md.	42	51	Malden, Mass.	6	1
Barre, Vt.	4		Manchester, Conn.	2	1
Battle Creek, Mich.	1	1	Marion, Ohio	1	
Berkeley, Cal.	1		Middletown, N. Y.	1	1
Bloomfield, N. J.	3	1	Montclair, N. J.	13	3
Boston, Mass.	84	25	Montgomery, Ala.	5	10
Brunswick, Ga.	2	1	Morgantown, W. Va.	1	
Cambridge, Mass.	3	2	Mount Vernon, N. Y.	1	1
Camden, N. J.	35		New Britain, Conn.	2	1
Charleston, W. Va.	6	5	Newburyport, Mass.	1	
Chicago, Ill.	551	157	New London, Conn.	1	
Chillicothe, Ohio	2	3	Newport, Ky.	10	1
Cleveland, Ohio	56	50	Newport, R. I.	4	
Columbia, S. C.	6		New York, N. Y.	917	653
Cranston, R. I.	5	5	Northampton, Mass.	1	1
Dayton, Ohio	5	5	North Tonawanda, N. Y.	3	2
Detroit, Mich.	33	84	Norwich, Conn.	3	2
Duluth, Minn.	8	6	Orange, N. J.	2	5
Dunkirk, N. Y.	2		Parkersburg, W. Va.	10	6
East Orange, N. J.	11	2	Passaic, N. J.	10	4
Elmira, N. Y.	2	3	Perth Amboy, N. J.	4	2
Englewood, N. J.	3	1	Philadelphia, Pa.	267	84
Fall River, Mass.	10	1	Port Chester, N. Y.	14	2
Flint, Mich.	2	3	Riverside, Cal.	1	
Framingham, Mass.	1		Rochester, N. Y.	16	3
Freeport, Ill.	1		Rome, N. Y.	2	
Grand Rapids, Mich.	9	2	Sacramento, Cal.	2	5
Green Bay, Wis.	1	1	Saginaw, Mich.	1	4
Hackensack, N. J.	3	7	San Diego, Cal.	2	1
Hancock, Mich.	2	2	Sandusky, Ohio	4	1
Harrison, N. J.	2		Sault Ste. Marie, Mich.	4	1
Hartford, Conn.	3	6	Sioux Falls, S. Dak.	2	4
Haverhill, Mass.	3	3	Somerville, Mass.	1	1
Helena, Ark.	3	3	Spartanburg, S. C.	1	
Highland Park, Mich.	8	3	Springfield, Mass.	9	1
Jersey City, N. J.	6		Stockton, Cal.	14	13
Joplin, Mo.	1		Taunton, Mass.	3	3
Kalamazoo, Mich.	1	1	Tiffin, Ohio	1	
Kansas City, Kans.	6		Topeka, Kans.	1	
Kansas City, Mo.	32	20	Trenton, N. J.	3	6
Kokomo, Ind.	2		Troy, N. Y.	3	4
Lackawanna, N. Y.	5	2	Urbana, Ill.	2	
Lancaster, Ohio	1	2	Wakefield, Mass.	2	1
Lawrence Mass.	2		Waterbury Conn.	16	2
Little Rock, Ark.	33	3	Wichita Kans.	1	
Long Branch, N. J.	1	1	Yonkers N. Y.	6	4
Lorain, Ohio	3	2	Youngstown, Ohio	1	6
Los Angeles, Cal.	19	24			

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POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for November and December, 1918.

Place.	New cases reported.	Place.	New cases reported.
Alabama (December):		California—Continued.	
Jefferson County	1	Mendocino County	1
California (November):		San Bernardino County—	
Lake County	1	Redlands	1
Los Angeles County—		San Francisco	2
Huntington Park	1	Total	6

City Reports for Week Ended Jan. 25, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass		1	New Haven, Conn	1	
Chicago, Ill	1		Oakland, Cal	1	

RABIES IN ANIMALS.

City Reports for Week Ended Jan. 25, 1919.

Rabies in animals was reported during the week ended January 25, 1919, as follows: Akron, Ohio, one case; Kansas City, Mo., three cases; Memphis, Tenn., two cases.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended February 8, 1919.

	Cases.		Cases.
Charleston sanitary district, S. C	1	Camp Pike zone, Ark	6
Camp Dodge zone, Iowa	1	Camp Polk zone, N. C	2
Camp Funston zone, Kans	5	Camp Sevier zone, S. C	1
Camp Gordon zone, Ga	2	Camp Sherman zone, Ohio	1
Camp Hancock zone, Ga	1	Camp Zachary Taylor zone, Ky. and Ind	7
Camp Lee zone, Va	1	Wilmington sanitary district, N. C	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 299.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended February 8, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	1	Fort Leavenworth zone, Kans	1
Camp Dodge zone, Iowa	1	Camp Polk zone, N. C	7
Camp Funston zone, Kans	5	Portsmouth and Norfolk County health district, Va	21
Gas and Flame School zone, Ga. and Ala	4	Camp Sevier zone, S. C	1
Gardner Field zone, La	2	Camp Wadsworth zone, S. C	1
Camp Gordon zone, Ga	44		

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SMALLPOX—Continued.

California Report for November, 1918—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
California:						
Alameda County—						
Oakland	6			1	5	
Butte County	1				1	
Chico	1				1	
Contra Costa County	2				2	
Martinez	1				1	
Richmond	1				1	
Fresno County	1				1	
Fresno	3				3	
Kern County	1				1	
Los Angeles County—						
Pasadena	1				1	
Pomona	5			1	4	
Los Angeles	4				4	
Monterey County	3				3	
Orange County—						
Santa Ana	5				5	
San Diego County—						
East San Diego	1			1		
San Diego	1				1	
San Francisco	4				4	
San Joaquin County—						
Stockton	4				4	
San Mateo County	3				2	
Santa Clara County	1				1	
Palo Alto	12			1	11	
San Jose	1				1	
Santa Cruz County	1				1	
Watsonville	14			1	13	
San Luis Obispo County—						
Arroyo Grande	2				2	
Siskiyou County	6				6	
Dunsmuir	2				2	
Sisson	1				1	
Stanislaus County	11				11	
Tulare County	3				3	
Total	102			5	97	

State Reports for December, 1918.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alabama:			Oregon:		
Colbert County	10		Clackamas County	1	
Cullman County	250		Clatsop County	2	
Dallas County	2		Grant County	2	
Etowah County	1	1	Hood River County	1	
Jefferson County	11		Jackson County	9	
Lauderdale County	8		Klamath County	1	
Lee County	1		Lincoln County	2	
Mobile County	3		Umatilla County	1	
Shelby County	6		Wasco County	2	
Winston County	1		Yamhill County	3	
			Portland	23	
Total	293	1	Total	47	

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SMALLPOX—Continued.

City Reports for Week Ended Jan. 25, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1		Madison, Wis	2	
Alliance, Ohio	1		Marinette, Wis	3	
Atlanta, Ga	16		Marshalltown, Iowa	7	
Bedford, Ind	2		Memphis, Tenn	1	
Berkeley, Cal	2		Middletown, Ohio	1	
Birmingham, Ala	2		Milwaukee, Wis	1	
Boise, Idaho	1		Minneapolis, Minn	5	
Brunswick, Ga	2		Muskogee, Okla	3	
Chanute, Kans	5		North Yakima, Wash	13	
Chicago, Ill	13		Ogden, Utah	6	
Cleveland, Ohio	9		Oklahoma City, Okl	8	
Council Bluffs, Iowa	1		Omaha, Nebr	17	
Dallas, Tex	2		Pekin, Ill	9	
Davenport, Iowa	1		Pittsburgh, Pa	3	
Denver, Colo	20		Pontiac, Mich	1	
Des Moines, Iowa	2		Portland, Oreg	7	
Detroit, Mich	4		Rock Island, Ill	6	
Elgin, Ill	8		St. Joseph, Mo	2	
Fargo, N. Dak	1		St. Paul, Minn	22	
Fort Dodge, Iowa	3		Salt Lake City, Utah	2	
Freeport, Ill	1		San Bernardino, Cal	1	
Great Falls, Mont	5		Seattle, Wash	12	
Green Bay, Wis	1		Sioux City, Iowa	2	
Ironwood, Mich	3		Springfield, Ohio	1	
Kalamazoo, Mich	3		Superior, Wis	3	
Kansas City, Mo	7		Tacoma, Wash	2	
Lincoln, Nebr	18		Tiffin, Ohio	2	
Long Beach, Cal	4		Toledo, Ohio	3	
Los Angeles, Cal	1		Washington, D. C	4	
Louisville, Ky	1		Youngstown, Ohio	1	
Ludington, Mich	1		Zanesville, Ohio	1	

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended February 8, 1919.

	Cases.		Cases.
Camp Bowie zone, Tex	12	Camp Pike zone, Ark	2
Fayetteville sanitary district, N. C	1	Camp Sheridan zone, Ala	12
Camp Gordon zone, Ga	10	Camp Sherman zone, Ohio	4
Camp Jackson zone, S. C	10	Camp Zachary Taylor zone, Ky. and Ind	49
Camp Logan zone, Tex	20	Tidewater health district, Va	15
Camp McClellan zone, Ala	3	Camp Travis zone, Tex	7
Picric Acid Plant zone, Ga	4		

TETANUS.

City Reports for Week Ended Jan. 25, 1919.

During the week ended January 25, 1919, there were three cases of tetanus reported—one each at New Orleans, La., St. Louis, Mo., and Troy, N. Y. There was one death reported at Kansas City, Mo.

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended February 8, 1919.

	Cases.		Cases.
Charleston sanitary district, S. C	1	Portsmouth and Norfolk County health district, Va	1
Camp Gordon zone, Ga	2	Portsmouth-Kittery sanitary district, N. H. and Me	1
Gulfport health district, Miss	1	Camp Zachary Taylor zone, Ky. and Ind	7
Camp Humphreys zone, Va	1	Tidewater health district, Va	3
Camp Jackson zone, S. C	3	Camp Travis zone, Tex	3
Camp Lee zone, Va	9	Camp Wadsworth zone, S. C	1
Camp Logan zone, Tex	1	Wilmington sanitary district, N. C	2
Camp McClellan zone, Ala	1		
Camp Pike zone, Ark	7		
Camp Polk zone, N. C	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 299.

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TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended February 8, 1919.

	Cases.		Cases.
Camp Pike zone, Ark.	1	Wilmington sanitary district, N. C.	1
Camp Polk zone, N. C.	1		

State Reports for November and December, 1918.

Place.	New cases reported.	Place.	New cases reported.
Alabama (December):		California (November)--Continued.	
Butler County	1	Los Angeles County—	
Colbert County	7	Long Beach	1
Coosa County	1	Los Angeles	6
Etowah County	1	Imperial County—	
Greene County	1	El Centro	1
Hale County	1	Riverside County—	
Henry County	3	Blythe	4
Jackson County	1	Banning	1
Jefferson County	7	San Diego County—	
Lauderdale County	1	Escondido	1
Lee County	1	National City	1
Marion County	1	San Francisco	4
Mobile County	1	Shasta County	1
Montgomery County	1	Santa Cruz County—	
Pike County	1	Santa Cruz	1
Talladega County	1	Total	3
Wilcox County	1		
Total	31	Oregon (December):	
California (November):		Baker County	1
Alameda County—		Clatsop County	1
Berkeley	1	Douglas County	1
Oakland	1	Hood River County	1
Fresno County	1	Klamath County	1
Fresno	1	Portland	2
Kings County—		Total	7
Hanford	1		

City Reports for Week Ended Jan. 25, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1		New Orleans, La	1	1
Baltimore, Md	2	1	Newton, Mass	2	
Birmingham, Ala	1		New York, N. Y	7	1
Boston, Mass	3		North Attleboro, Mass	1	
Buffalo, N. Y	2	2	Oakland, Cal	1	1
Butler, Pa	19		Omaha, Nebr	1	
Chicago, Ill	5	1	Orange, N. J		1
Cumberland, Md	1		Philadelphia, Pa	7	1
Dallas, Tex		1	Rahway, N. J	1	
Detroit, Mich	2	1	Reading, Pa	1	
Haverhill, Mass	1		Richmond, Va		1
Houston, Tex	2		Riverside, Cal		1
Indianapolis, Ind		1	Rochester, N. Y	1	
Ironton, Ohio	6		Saginaw, Mich	1	
Kalama oo, Mich	1		St. Louis, Mo	2	
Kansas City, Kans	3		Somerville, Mass	2	
Kansas City, Mo	1	1	Washington, D. C	3	
Lawrence, Mass	8		Washington, Pa	3	
Los Angeles, Cal	2	3	Williamsport, Pa	1	
Milwaukee, Wis	1	2	Wilmington, Del		1
Mobile, Ala	1		Wilmington, N. C	1	
Moline, Ill	1	1	Youngstown, Ohio		1
New Bedford, Mass	1		Zanesville, Ohio	2	1

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for November and December, 1918.

During the month of November, 1918, there were reported in California 177 cases of diphtheria, 6 cases of measles, and 122 cases of scarlet fever. During December the reports for these diseases were as follows: Alabama, diphtheria 39, measles 110, and scarlet fever 35; Oregon, diphtheria 25, measles 34, and scarlet fever 32.

City Reports for Week Ended Jan. 25, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams, Mass	14,406	5								
Akron, Ohio	93,604	13	5		7		3		2	
Alameda, Cal	28,433	10	1							
Albany N. Y	106,632		7				3		1	
Alexandria, La	16,232	11			2					
Allentown, Pa	65,109		4				2		1	
Alton, Ill	23,783	14								3
Altoona, Pa	59,712		5				1			
Ann Arbor, Mich	15,041	9								
Arlington, Mass	13,073	9								
Asbury Park, N. J	14,629	3	1		1				1	
Ashtabula, Ohio	22,008	6					1			
Atlanta, Ga	196,144		1		2		6			9
Atlantic City, N. J	59,515	11							1	1
Attleboro, Mass	19,776						2			
Austin, Tex	35,612	4	2							
Baltimore, Md	594,637	401	36	5	11		38	1	49	35
Barre, Vt	12,401	3								1
Battle Creek, Mich	30,159	8	2				4			
Beatrice, Nebr	10,437	5								
Beaumont, Tex	28,851	21								
Bedford, Ind	10,613	6					1			2
Bellaire, Ohio	14,575	9							1	
Benton Harbor, Mich	11,099	4								
Berkeley, Cal	60,427	31	3				1		1	
Berlin, N. H	13,892	2								
Beverly, Mass	22,128	4								
Billings, Mont	15,123	6					1			
Binghamton, N. Y	64,864	17	4		1		3			2
Birmingham, Ala	189,716	87	3		4	1	1	1	11	8
Bloomfield, N. J	19,013	1							1	
Bluefield, W. Va	16,123						6			
Boise, Idaho	35,951	8					1			
Boston, Mass	767,813	401	56	8	8		25	1	47	17
Braddock, Pa	22,060		2							
Brazil, Ind	10,472	3								
Bridgeport, Conn	124,794	51	9				4		5	1
Bristol, Conn	16,318	7	1	1			1			
Brockton, Mass	69,152	29	1				1		2	2
Brookline, Mass	33,526	11							1	
Brunswick, Ga	10,984	7			11					1
Buffalo, N. Y	475,781	252	64	11	17		17	1	26	11
Burlington, Iowa	25,144	4					1			
Burlington, Vt	21,802	10			25					
Butte, Mont	44,057		1		1		3			
Cadillac, Mich	10,158								1	
Cairo, Ill	15,995	6								
Cambridge, Mass	114,293	48	3		1				9	11
Camden, N. J	108,117		1				2		4	
Canton, Ill	13,674						1			
Canton, Ohio	62,566	35			1					1
Carbondale, Pa	19,807		1							
Carlisle, Pa	10,795		1							
Chambersburg, Pa	12,475		1							
Chanute, Kans	12,968	7					1			
Charleston, S. C	61,041	41								2
Charleston, W. Va	31,080	11					1			1
Charlotte, N. C	40,799	22			2				1	
Chelsea, Mass	48,405	27	2				1		5	5

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Jan. 25, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Chester, Pa	41,857				1				2	
Chicago, Ill	2,547,201	914	121	15	61	1	53	1	314	7
Chicopee, Mass	29,950	6	1							1
Chillicothe, Ohio	15,625	7			1		5			
Cincinnati, Ohio	414,248	110	8	1	2		5		25	1
Cleveland, Ohio	692,259	272	16		4		4		32	3
Clinton, Mass	[1] 13,075									
Cohoes, N. Y	25,292	6							2	
Colorado Springs, Colo	38,965	12	1				1		2	
Columbia, Pa	[1] 11,454				10					
Columbia, S. C	35,165				1				1	
Columbus, Ohio	220,185	70					5		4	
Concord, N. H	22,858	13								
Connellsville, Pa	15,876		1				1		1	
Corpus Christi, Tex	10,780	6	1							
Council Bluffs, Iowa	31,938	14					1			
Covington, Ky	59,623	25	2						1	
Cranston, R. I	26,773						2			
Cumberland, Md	26,686	10			21		2		2	
Dallas, Tex	129,738	55			1	1	1		1	
Danvers, Mass	10,037	1	2						1	
Danville, Ill	32,969	17	1						2	
Danville, Va	20,183	2								
Davenport, Iowa	49,618						1			
Dayton, Ohio	128,939	34	1		1		1			
Dedham, Mass	10,618	3								
Denver, Colo	268,439	83	6		1		7			1
Des Moines, Iowa	104,052		3		1		8			
Detroit, Mich	619,648	33	99	9	5	1	63		32	1
Dover, N. H	13,276	2								
Dubois, Pa	14,994		1							
Dubuque, Iowa	40,096		4							
Duluth, Minn	97,077	28	5						4	
Dunkirk, N. Y	21,311	5	1							
Dunmore, Pa	21,286		2							
Durham, N. C	26,160	14								
East Chicago, Ind	30,286	9								
East Liverpool, Ohio	22,941	3					1			
Easton, Pa	30,854				8					
East Orange, N. J	43,761	8								
East Providence, R. I	18,485						1			
Eau Claire, Wis	18,887				6		3			
Elgin, Ill	28,562	9								
Elmira, N. Y	38,272	19			1		1			
Englewood, N. J	12,003	5	1		1				1	
Erie, Pa	76,592		6				1		6	
Escanaba, Mich	15,854	6								
Eureka, Cal	15,142	5								
Evanston, Ill	29,304	5	1		1					
Evansville, Ind	76,981	12								
Everett, Mass	40,160	9	1						3	
Everett, Wash	37,205						4			
Fairmount, W. Va	16,111						1			
Fall River, Mass	129,828	47	8	1	20	2			10	
Fargo, N. Dak	17,872	11								
Findlay, Ohio	14,858	2							1	
Flint, Mich	57,386	19	9				2			
Fond du Lac, Wis	21,486	6					2			
Fort Dodge, Iowa	21,039						2			
Fort Scott, Kans	10,564	4								
Fort Wayne, Ind	78,014	17					2			
Framingham, Mass	14,149	4								
Frederick, Md	11,225	8					1			
Freeport, Ill	19,844	6								
Fremont, Ohio	11,034	3							1	
Fresno, Cal	36,314	13								
Galesburg, Ill	24,029	13			6					
Galveston, Tex	42,650	9	2							
Grand Forks, N. Dak	16,342	4								
Grand Rapids, Mich	132,861	47	6				2		6	

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Jan. 25, 1919—Continued.

City	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases	Deaths.
Great Falls, Mont.	[1] 13,948	5	.....	.....	3	.....	.....	.....	.....	.....
Green Bay, Wis.	30,017	16	1	.....	.....	.....	.....	.....	.....	.....
Greenfield, Mass.	12,251	4	.....	.....	1	.....	1	.....	.....	1
Greensboro, N. C.	20,171	10	.....	.....	.....	.....	.....	.....	.....	4
Greenwich, Conn.	19,594	.....	.....	.....	.....	.....	.....	.....	2	1
Hackensack, N. J.	17,412	14	.....	.....	.....	.....	.....	.....	.....	.....
Hancock, Mich.	12,578	3	.....	.....	.....	.....	.....	.....	.....	.....
Harrisburg, Pa.	73,276	.....	.....	.....	.....	.....	2	.....	.....	.....
Harrison, N. J.	17,345	.....	.....	.....	.....	.....	.....	.....	2	.....
Hartford, Conn.	112,831	62	9	.....	31	1	10	2	3	1
Haverhill, Mass.	49,180	16	2	.....	.....	.....	.....	.....	2	2
Hazelton, Pa.	28,981	.....	3	.....	.....	.....	.....	.....	.....	.....
Helena, Ark.	11,122	8	.....	.....	.....	.....	.....	.....	1	1
Highland Park, Mich.	33,859	7	10	.....	.....	.....	2	.....	1	.....
Hoboken, N. J.	78,324	10	5	.....	.....	.....	.....	.....	3	.....
Holland, Mich.	12,459	2	.....	.....	.....	.....	.....	.....	.....	.....
Hoquiam, Wash.	12,230	.....	.....	.....	.....	.....	2	.....	.....	.....
Houston, Tex.	116,878	58	4	.....	1	.....	1	.....	.....	1
Hutchinson, Kans.	21,461	.....	.....	.....	2	.....	.....	.....	.....	.....
Indianapolis, Ind.	283,622	102	19	.....	5	.....	5	.....	5	10
Ironton, Ohio.	14,079	8	.....	.....	.....	.....	.....	.....	.....	.....
Ironwood, Mich.	15,095	9	.....	.....	.....	.....	.....	.....	.....	.....
Ithaca, N. Y.	16,017	4	.....	.....	.....	.....	11	.....	1	.....
Janesville, Wis.	14,411	7	.....	.....	.....	.....	.....	.....	.....	2
Jersey City, N. J.	312,557	.....	32	.....	4	.....	9	.....	13	.....
Johnstown, Pa.	70,473	.....	5	.....	3	.....	.....	.....	.....	.....
Joplin, Mo.	33,400	5	1	.....	.....	.....	.....	.....	7	.....
Kalamazoo, Mich.	50,408	18	2	.....	.....	.....	.....	.....	2	1
Kansas City, Kans.	102,096	.....	2	.....	.....	.....	.....	.....	6	.....
Kansas City, Mo.	305,816	138	7	1	2	.....	3	.....	.....	12
Keene, N. H.	10,725	4	.....	.....	.....	.....	.....	.....	.....	.....
Knoxville, Tenn.	59,112	.....	.....	.....	2	.....	.....	.....	3	3
Kokomo, Ind.	21,929	5	.....	.....	.....	.....	5	.....	.....	.....
Lackawanna, N. Y.	16,219	7	1	.....	9	.....	.....	.....	1	.....
La Crosse, Wis.	31,833	7	.....	.....	.....	.....	.....	.....	.....	.....
La Fayette, Ind.	21,481	7	.....	.....	.....	.....	1	.....	.....	1
Lakewood, Ohio.	23,813	9	.....	.....	.....	.....	.....	.....	5	1
Lancaster, Ohio.	16,086	5	.....	.....	2	.....	.....	.....	.....	.....
Lancaster, Pa.	51,437	.....	2	.....	38	.....	.....	.....	.....	.....
Lawrence, Kans.	13,477	4	.....	.....	2	.....	.....	.....	1	2
Lawrence, Mass.	102,923	40	3	1	.....	.....	.....	.....	.....	2
Leavenworth, Kans.	[1] 19,363	4	2	.....	.....	.....	.....	.....	.....	.....
Lima, Ohio.	37,145	19	.....	.....	.....	.....	2	.....	.....	2
Lincoln, Nebr.	46,967	18	2	.....	.....	.....	10	.....	1	.....
Lincoln, R. I.	10,473	.....	1	.....	.....	.....	.....	.....	.....	.....
Little Rock, Ark.	58,716	12	.....	.....	2	.....	6	.....	3	1
Logansport, Ind.	21,338	13	.....	.....	.....	.....	1	1	.....	1
Long Beach, Cal.	29,163	22	1	.....	.....	.....	.....	.....	.....	.....
Long Branch, N. J.	15,733	2	1	.....	.....	.....	.....	.....	1	.....
Lorain, Ohio.	38,266	.....	.....	.....	8	.....	2	.....	.....	.....
Los Angeles, Cal.	535,485	355	6	1	2	.....	10	.....	54	40
Louisville, Ky.	240,808	73	14	3	.....	.....	1	.....	10	3
Lowell, Mass.	114,366	68	3	1	7	.....	2	.....	8	6
Lynchburg, Va.	33,497	22	.....	.....	.....	.....	.....	.....	.....	1
Lynn, Mass.	104,534	35	11	1	1	.....	5	.....	4	6
McKeesport, Pa.	48,249	.....	.....	.....	.....	.....	4	.....	1	.....
Madison, Wis.	31,315	7	.....	.....	2	.....	3	.....	.....	.....
Mahanoy City, Pa.	17,709	.....	2	.....	.....	.....	.....	.....	.....	.....
Malden, Mass.	52,243	11	1	.....	.....	.....	5	.....	1	2
Manchester, Conn.	15,859	6	.....	.....	4	.....	4	.....	.....	.....
Manchester, N. H.	79,607	53	3	.....	.....	.....	5	.....	12	4
Manistee, Mich.	[1] 12,381	.....	1	.....	.....	.....	.....	.....	.....	.....
Manitowoc, Wis.	13,731	6	.....	.....	.....	.....	.....	.....	.....	2
Marinette, Wis.	[1] 14,610	7	.....	.....	4	.....	1	.....	.....	.....
Marion, Ind.	19,923	11	2	.....	4	.....	8	.....	.....	.....
Marion, Ohio.	24,129	.....	1	.....	.....	.....	.....	.....	.....	.....
Marshalltown, Iowa.	14,519	.....	1	.....	.....	.....	3	.....	.....	.....
Martins Ferry, Ohio.	10,135	.....	1	.....	.....	.....	1	.....	.....	.....
Mason City, Iowa.	14,538	3	.....	.....	.....	.....	.....	.....	.....	.....

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Jan. 25, 1919—Continued.

City	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Meadville, Pa	13,968		1							
Medford, Mass	26,681	12							1	
Melrose, Mass	17,724	2					1			
Memphis, Tenn	151,877	117	3		9		3		6	
Meriden, Conn	29,431		4				3			
Methuen, Mass	14,320	3								
Middletown, N. Y	15,890								1	
Middletown, Ohio	16,584	2								
Milwaukee, Wis	445,008	123	12	1			17		27	
Minneapolis, Minn	373,448	109	22	2	5		16		15	
Missoula, Mont	19,075	17					3			
Mobile, Ala	59,201	50			1					
Moline, Ill	27,976	3	1							
Monessen, Pa	23,070		6							
Montclair, N. J	27,087	4							1	
Montgomery, Ala	44,039	18								
Morgantown, W. Va	14,444	2							1	
Morristown, N. J	13,410	6							1	
Mount Carmel, Pa	20,709		2						8	
Mount Vernon, N. Y	37,991	11								
Muskogee, Okla	47,173		1							
Nanticoke, Pa	23,811		1		18					
Nashville, Tenn	118,136		1		1		11		1	
New Bedford, Mass	121,622	39	5		20		6		15	
New Britain, Conn	55,385	14								
Newburyport, Mass	15,291	5	2							
New Castle, Pa	41,915		2							
New Haven, Conn	152,275	63	4	1	6		6		11	
New London, Conn	21,199	7							2	
New Orleans, La	377,010	345	13		1				24	2
Newport, Ky	32,133	11								
Newport, R. I	30,585	9								
Newton, Mass	44,345	10	2		1				1	
New York, N. Y	5,737,492	2,577	298	37	44	1	136	5	361	19
Niagara Falls, N. Y	38,466	16	2				1			
Norfolk, Va	90,148		2		5		1		2	
North Adams, Mass	[1] 22,019	10		1					1	
Northampton, Mass	20,006	13	1		1		1			
North Attleboro, Mass	11,248	5	1		1					
North Tonawanda, N. Y	14,060	10	1	1					1	
North Yakima, Wash	22,058						7			
Norwich, Conn	21,923	3	2					1	2	
Oakland, Cal	206,405	118	4				2		5	
Oak Park, Ill	27,816	11	1		11				1	
Ogden, Utah	32,345	13	2							
Oklahoma City, Okla	97,588	27	2		4		2			
Olean, N. Y	16,927	6								
Omaha, Nebr	177,777		4		10		4			
Orange, Conn	14,393	6	1						4	
Orange, N. J	33,[illegible]	22	2				2		1	
Parkersburg, W. Va	21,059	9							2	
Passaic, N. J	74,478	15	9						2	
Pawtucket, R. I	60,666	29					1			
Peekskill, N. Y	19,034	3								
Pekin, Ill	10,973						1			
Peoria, Ill	72,184	29		1						
Perth Amboy, N. J	42,046	10	1							
Philadelphia, Pa	1,735,514	762	73	18	16	2	50	1	115	9
Piqua, Ohio	14,275	2					1			
Pittsburgh, Pa	586,196		14		1		10		25	
Pittsfield, Mass	39,678	15								
Plainfield, N. J	24,330	9	4		1		5		1	
Plattsburg, N. Y	13,111	9	2							
Plymouth, Mass	14,001	4		1						
Plymouth, Pa	19,439		1		20					
Pocatello, Idaho	12,806	5								
Pontiac, Mich	18,006	3	4							
Port Chester, N. Y	16,727	5	1							
Portland, Me	64,720	37	1				3			
Portland, Oreg	308,399	194			1		4		6	

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Jan. 25, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Portsmouth, N. H.	11,730	.....	.....	.....	.....	.....	1	.....	.....	.....
Pottsville, Pa.	22,717	.....	3	.....	6	.....	.....	.....	.....	.....
Poughkeepsie, N. Y.	30,786	14	3	.....	.....	.....	1	.....	1	.....
Providence, R. I.	250,895	136	18	1	.....	.....	8	.....	.....	8
Quincy, Ill.	36,832	13	.....	.....	.....	.....	7	.....	.....	3
Quincy, Mass.	39,022	13	2	.....	.....	.....	.....	.....	1	.....
Rahway, N. J.	10,361	9	.....	.....	.....	.....	.....	.....	.....	.....
Raleigh, N. C.	20,274	19	.....	.....	.....	.....	.....	.....	.....	1
Reading, Pa.	111,607	.....	5	.....	116	.....	2	.....	2	.....
Redlands, Cal.	14,573	4	.....	.....	.....	.....	6	.....	.....	2
Richmond, Va.	158,702	90	4	.....	.....	.....	3	.....	6	5
Riverside, Cal.	20,496	.....	.....	.....	1	.....	2	.....	.....	.....
Rochester, N. Y.	264,714	.....	14	1	2	.....	8	1	12	3
Rockford, Ill.	56,739	24	1	.....	3	.....	1	.....	.....	.....
Rock Island, Ill.	29,452	3	.....	.....	.....	.....	.....	.....	1	.....
Rocky Mount, N. C.	12,673	10	.....	.....	.....	.....	.....	.....	.....	1
Rome, N. Y.	24,259	.....	1	.....	1	.....	.....	.....	4	.....
Rutland, Vt.	15,038	5	.....	.....	.....	.....	.....	.....	.....	.....
Sacramento, Cal.	68,584	59	2	.....	.....	.....	1	.....	2	9
Saginaw, Mich.	56,469	10	.....	.....	1	.....	1	.....	.....	1
St. Joseph, Mo.	86,408	35	7	1	.....	.....	3	.....	.....	2
St. Louis, Mo.	766,630	256	67	3	2	.....	8	.....	46	21
St. Paul, Minn.	252,465	65	17	2	8	.....	28	.....	17	3
Salt Lake City, Utah	121,623	70	4	1	1	.....	2	.....	1	1
San Bernardino, Cal.	17,616	16	.....	.....	.....	.....	.....	1	.....	2
San Diego, Cal.	56,412	32	2	.....	1	.....	3	.....	9	4
Sandusky, Ohio.	20,226	6	.....	.....	.....	.....	.....	.....	2	.....
San Jose, Cal.	39,810	15	.....	.....	.....	.....	1	.....	.....	2
Santa Barbara, Cal.	15,360	8	.....	.....	.....	.....	.....	.....	.....	.....
Santa Cruz, Cal.	15,150	1	.....	.....	.....	.....	.....	.....	.....	.....
Saratoga Springs, N. Y.	13,839	7	.....	.....	.....	.....	.....	.....	1	.....
Sault Ste. Marie, Mich.	14,130	2	.....	.....	.....	.....	.....	.....	.....	.....
Schenectady, N. Y.	103,774	26	3	.....	1	.....	1	.....	1	3
Scranton, Pa.	140,541	.....	11	.....	.....	.....	5	.....	2	.....
Seattle, Wash.	366,445	.....	8	.....	17	.....	12	.....	.....	.....
Shamokin, Pa.	21,274	.....	7	.....	6	.....	1	.....	.....	.....
Sharon, Pa.	19,156	.....	.....	.....	.....	.....	2	.....	.....	.....
Shenandoah, Pa.	29,753	.....	1	.....	8	.....	1	.....	2	.....
Sioux City, Iowa.	58,568	.....	2	.....	.....	.....	3	.....	.....	.....
Sioux Falls, S. Dak.	16,887	9	.....	.....	.....	.....	.....	.....	.....	.....
Somerville, Mass.	88,618	33	8	.....	.....	.....	2	.....	2	3
South Bend, Ind.	70,967	17	1	.....	12	.....	1	.....	.....	.....
Southbridge, Mass.	14,465	2	.....	.....	.....	.....	.....	.....	.....	.....
Spartanburg, S. C.	21,985	4	.....	.....	3	.....	.....	.....	.....	1
Spokane, Wash.	157,056	.....	.....	.....	.....	.....	1	.....	.....	.....
Springfield, Ill.	62,623	49	5	2	.....	.....	1	.....	.....	1
Springfield, Mass.	108,668	39	5	.....	.....	.....	12	.....	6	5
Springfield, Mo.	41,169	8	.....	.....	.....	.....	.....	.....	.....	3
Springfield, Ohio.	52,296	21	1	.....	15	.....	.....	.....	3	1
Steubenville, Ohio.	28,259	14	.....	.....	.....	.....	.....	.....	.....	.....
Stockton, Cal.	36,209	35	.....	.....	.....	.....	2	.....	.....	1
Superior, Wis.	47,167	14	1	.....	.....	.....	.....	.....	.....	.....
Syracuse, N. Y.	158,559	58	8	3	3	.....	7	1	4	6
Tacoma, Wash.	117,446	.....	.....	.....	.....	.....	1	.....	.....	.....
Taunton, Mass.	36,610	25	1	.....	13	.....	.....	1	1	.....
Terre Haute, Ind.	67,361	29	.....	.....	.....	.....	.....	.....	.....	4
Tiffin, Ohio.	12,982	4	.....	.....	.....	.....	.....	.....	.....	.....
Toledo, Ohio.	202,010	10	5	2	.....	.....	12	.....	9	3
Topeka, Kans.	49,538	11	.....	.....	.....	.....	.....	.....	.....	1
Trenton, N. J.	113,974	.....	7	.....	.....	.....	.....	.....	5	6
Troy, N. Y.	78,094	48	4	1	1	.....	5	.....	1	4
Tuscaloosa, Ala.	10,824	4	1	.....	.....	.....	.....	.....	2	.....
Urbana, Ill.	10,146	.....	.....	.....	14	.....	.....	.....	1	.....
Vallejo, Cal.	13,803	7	.....	.....	.....	.....	.....	.....	1	1
Vancouver, Wash.	13,805	.....	3	.....	.....	.....	.....	.....	1	.....
Wakefield, Mass.	12,947	7	3	.....	.....	.....	.....	.....	2	4
Waltham, Mass.	31,611	11	.....	.....	.....	.....	.....	.....	2	1
Washington, D. C.	369,282	182	19	2	2	.....	6	.....	40	9
Washington, Pa.	22,076	.....	.....	.....	.....	.....	.....	.....	3	.....
Waterbury, Conn.	99,201	5	5	1	1	1	5	.....	2	1
Watertown, Mass.	15,188	3	.....	.....	.....	.....	.....	.....	.....	.....
Watertown, N. Y.	33,404	1	.....	.....	.....	.....	.....	.....	.....	.....

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Jan. 25, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles		Scarlet fever.		Tuberculosis	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Wausau, Wis	19,666	5	.....	.....	.....	.....	.....	.....	.....	.....
Westfield, Mass	18,769	13	7	1	.....	.....	4	.....	.....	1
West Hoboken, N. J	44,386	9	.....	.....	.....	.....	1	.....	2	.....
West New York, N. J	19,613	5	4	.....	.....	.....	1	.....	.....	1
West Orange, N. J	13,964	.....	2	.....	.....	.....	.....	.....	.....	.....
Wheeling, W. Va	43,657	22	1	.....	.....	.....	.....	.....	1	.....
Wichita, Kans	73,597	28	.....	.....	2	.....	.....	.....	2	1
Wilkes-Barre, Pa	78,334	.....	4	.....	3	.....	1	.....	1	.....
Williamsport, Pa	34,123	.....	2	.....	.....	.....	.....	.....	.....	.....
Wilmington, Del	95,369	67	2	.....	.....	.....	.....	.....	.....	2
Wilmington, N. C	30,400	25	.....	.....	1	.....	.....	.....	1	1
Winchester, Mass	10,812	6	.....	.....	.....	.....	.....	.....	.....	.....
Winona, Minn	[1] 18,583	10	.....	.....	.....	.....	.....	.....	.....	.....
Winston-Salem, N. C	33,136	15	2	.....	.....	.....	1	.....	3	3
Winthrop, Mass	13,105	.....	.....	.....	3	.....	1	.....	.....	.....
Woburn, Mass	16,076	2	.....	.....	.....	.....	.....	.....	.....	.....
Yonkers, N. Y	103,066	30	2	.....	.....	.....	1	.....	12	3
Youngstown, Ohio	112,282	68	2	1	7	.....	2	.....	.....	.....
Zanesville, Ohio	31,320	15	1	.....	.....	.....	.....	.....	.....	1

[1] Population Apr. 15, 1910.

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FOREIGN.

ARABIA.

Influenza—Aden.

Influenza was reported present at Aden, Arabia, during November and December, 1918, with 77 fatalities. (Population in 1911, 46,165.)

CANADA.

Influenza—Winnipeg.

Influenza was reported present at Winnipeg, Manitoba, Canada, in October, 1918. During the month of November, 1918, 9,031 cases of the disease were notified, with 526 deaths, and in December, 1918, 2,859 cases, with 197 fatalities. During the two weeks ended January 14, 1919, 847 cases were notified, with 79 fatalities, and during the week ended January 25, 1919, 126 cases with 22 fatalities. (Estimated population, 183,595.)

DUTCH GUIANA.

Influenza—Parimaribo.

Influenza was reported present in epidemic form at Parimaribo, Dutch Guiana, during the last week in November and throughout the month of December, 1918. On January 14, 1919, the disease was reported still present.

MALTA.

Influenza—September, 1918.

Influenza was reported present in the island of Malta during the month of September, 1918.

PORTUGUESE EAST AFRICA.

Further Relative to Influenza—Lourenço Marques.[1]

During the two weeks ended November 17, 1918, epidemic influenza was reported present at Lourenço Marques, with a total of 252 cases. (Officially estimated population, 14,000.)

[1] Public Health Reports, Jan. 10, 1919, p. 65.

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SWEDEN.

Influenza—Gothenburg—Malmo—Stockholm.

At Gothenburg, Sweden, 1,084 cases of influenza were reported for the week ended July 27, 1918. During the month of August 2,981 cases with an inconsiderable mortality were reported. For the month of September, 1918, 1,981 cases were reported. In October, 1918, a total of 9,644 cases was reported with 409 fatalities; in November, 3,693 cases with 196 fatalities. During the week ended December 7, 1918, 630 cases with 23 fatalities were reported. (Population, 196,300.)

Influenza was reported at Malmo, Sweden, during the weeks ended July 13 and 27, 1918, with 28 and 36 cases respectively. During the week ended August 3, 1918, 386 cases were reported and in the three weeks ended August 10, August 17, and August 31, a total of 1,234 cases was reported, the greatest number, viz., 629 cases being reported for the week ended August 17. During the month of September 3,092 cases with 73 fatalities were reported, the greatest number, viz. 1,614 cases with 56 deaths, having occurred during the last week of the month. Prevalence of influenza was reported in October for the weeks ended October 5, 12, and 19, as follows: 1,924, 1,843, and 1,400, with a total of 220 fatalities. In November, 1918, a total of 1,738 cases was reported for the entire month, with 103 fatalities. During the week ended December 7, 1918, 516 cases with 23 fatalities were reported. (Estimated population, 112,700.)

At Stockholm influenza was reported present during August, 1918, with 733 cases, of which 411 cases were notified during the second week in August and 42 cases from August 25 to 31, 1918. From September 15 to 28, 232 cases were notified and during the month of October, 1,458 cases. (Estimated population, 413,163.)

UNION OF SOUTH AFRICA.

Influenza—East London—Johannesburg.

Influenza was reported present at East London, Union of South Africa, during the month of October, 1918, with 194 fatalities, of which 149 occurred among the native population. (Population, 25,521; European, 14,492; native, 11,029.)

At Johannesburg epidemic influenza was reported present throughout the month of October, 1918. During this period 1,499 fatalities were reported from influenza and 188 from pneumonia in a population officially estimated at 254,939.

WEST INDIES.

Influenza—Trinidad.

Influenza in light form was reported present in the island of Trinidad, West Indies, in December, 1918.

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Rangoon	Nov. 3–9	4	4	

SMALLPOX.

Canada:				
Nova Scotia—				
Halifax	Jan. 19–25	10		
Sydney	do	1		
Quebec—				
Paspebiac	do	1		
Canal Zone	Aug. 1–Dec. 31	133		Occurring at Colon, Panama, and various points in interior.
Do	Jan. 1–25	28		
China:				
Foochow	Dec. 15–21			Present.
Nanking	do			Do.
Egypt:				
Alexandria	Dec. 17–23	1	1	
India:				
Bombay	Nov. 10–16	1		
Madras	Nov. 24–30	6	3	
Rangoon	Nov. 17–23	1	1	
Mesopotamia:				
Bagdad	Nov. 2–8	59	9	
Mexico:				
Mexico City	Sept. 22–Nov. 2	14		
Newfoundland:				
St. John's	Jan. 18–24	1		
Outports—				
Kings Cove	do	1		
St. Jacques	do	2		
Portuguese East Africa:				
Lourenço Marques				July 1–Oct. 31, 1918: 45 fatal cases.
Spain:				
Seville	Nov. 1–30		2	
Valencia	Dec. 15–21	25	5	
Union of South Africa:				
Johannesburg	Oct. 1–31	7		

TYPHUS FEVER.

Egypt:				
Alexandria	Dec. 10–31	18	12	
Great Britain:				
Glasgow	Dec. 22–28	5		
Mexico:				
Mexico City	Sept. 22–Nov. 2	244		

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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West Java				Oct. 2–Nov. 6, [illegible]
Batavia	Oct. 2–Nov. 6	161	95	deaths, 123.
esopotamia:				
Bagdad	Oct. 11–18	8		
ilippine Islands:				
Manila	Sept. 22–Dec. 28	181	121	
Provinces				Nov. 2–9, 1918: Cases, 511; deaths, 417. Nov. 17–Dec. 21, 1918: Cases, 1,015; deaths, 731.
Albay	Dec. 15–21	1	1	
Bataan	Nov. 17–Dec. 21	37	31	
Batangas	Nov. 2–9	156	141	
Do	Nov. 17–Dec. 21	71	60	
Bohol	Nov. 2–9	19	17	
Do	Nov. 17–Dec. 21	12	5	
Bulacan	Oct. 27–Nov. 2	5	6	
Do	Nov. 17–Dec. 7	27	19	
Cavite	Oct. 27–Nov. 2	38	28	
Do	Nov. 17–Dec. 21	144	63	
Cebu	Dec. 15–21	41	20	
Ilocos Sur	Dec. 8–21	5		
Iloilo	Oct. 27–Nov. 2	9	6	
Do	Nov. 17–Dec. 21	70	51	
Laguna	Oct. 27–Dec. 21	13	7	
Mindoro	Nov. 24–30	4	5	
Misamis	Oct. 27–Nov. 2	6	5	
Do	Nov. 17–23	40	26	
Oriental Negros	Nov. 2–9	20	8	
Do	Nov. 17–Dec. 7	6	6	
Pampanga	Nov. 24–Dec. 14	4	4	
Pangasinan	Nov. 2–9	236	192	
Do	Nov. 17–Dec. 21	366	271	
Rizal	Oct. 27–Nov. 2	3	1	
Do	Nov. 24–30	16	5	
Samar	Dec. 15–21	8	1	
Sorsogon	Nov. 17–23	8	4	
Tayabas	Nov. 2–9	7	4	
Do	Nov. 17–Dec. 21	43	17	
Union	Nov. 2–Dec. 14	16	12	
Zamboanga	Dec. 8–21	18	12	
ssia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17–Aug. 21	2,943	1,455	In civil hospitals. In military hospitals, July 5–Aug. 21, 1918: Cases, 884; deaths, 783.

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Samarang	Sept. 25–Oct. 16	6	6	deaths, 14.
Siam:				
Bankok	Sept. 21–28	4	3	
Do	Oct. 5–12	2	2	
Venezuela:				
Caracas	Dec. 30	1		

SMALLPOX.

Algeria:				
Algiers	Oct. 1–Dec. 31	2	1	
Canada:				
New Brunswick—				
Campbellton	Dec 22–28	1		
Do	Jan. 5–11	1		
St. John	Nov. 8–14	3		
Nova Scotia—				
Bear River	Dec. 29–Jan. 4			Present.
Bigbee	Jan. 10			Do.
Digby	do			Do.
Halifax	Dec. 7–28	10		
Do	Jan. 5–18	30		
Middleton	Dec. 29–Jan. 4			Do.
Sydney	Jan. 5–11	1		
Ontario—				
North Bay	Jan. 19–25	1		
Ottawa	Jan. 12–25	5		
Quebec—				
Montreal	Jan. 24–Dec. 21	2		
Do	Jan. 12–25	12		
Paspebiac	Jan. 12–18	1		
Quebec	Dec. 15–21	1		
Do	Dec. 29–Jan. 4	1		
Canal Zone:				
Colon	Dec. 15–21	1		
Do	Dec. 29–Jan. 4	1		
China:				
Amoy	Oct. 13–Dec. 8			Do.
Canton	Nov. 17–23			Do.
Chungking	Nov. 10–30			Do.
Foochow	Nov. 24–Dec. 13			Do.
Nanking	Dec. 1–7			Do.
Chosen:				
Chemulpo	Nov. 1–30	2		
Denmark:				
Copenhagen	Nov. 9–Dec. 14	11		

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Ciudad Juarez	Nov. 24-30	1		
Newfoundland:				
St. Johns	Dec. 6-20	4		
Do	Dec. 28-Jan. 10	2		
Outports—				
Avondale	do	4		
Blaine Harbor	Dec. 14-20	2		
Bay of Islands	Jan. 11-17	6		
Bay Roberts	Dec. 21-27	1		
Bryants Cove	Dec. 7-13	3		
Burin	do	4		
Coleys Point	Dec. 14-20	1		
Musgrave Harbor	Dec. 7-13	4		
Do	Jan. 11-17	6		
Paradise	Dec. 7-13	60		Placentia Bay.
Philippine Islands:				
Manila	Nov. 2-9	2	2	
Portugal:				
Lisbon	Nov. 16-30	649		
Siberia:				
Vladivostok	Nov. 1-3	4		
Spain:				
Cadiz	Oct. 1-31		3	
Madrid	Sept. 1-Oct. 31		153	
Valencia	Nov. 10-Dec. 7	15	4	
Straits Settlements:				
Penang	Oct. 6-12	1		
Union of South Africa:				
Cape of Good Hope State—				
Cape Town	Aug. 1-30	1		

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-30		1	
Brazil:				
Ceara	Sept. 14-21	1		
China:				
Antung	Dec. 2-15	2		
Colombia:				
Barranquilla	Nov. 8-Dec. 28		3	
Egypt:				
Alexandria	Oct. 14-Dec. 2	67	44	
Greece:				
Saloniki	Sept. 29-Dec. 7		28	
Japan:				
Nagasaki	Nov. 10-Dec. 22	12	4	

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San Salvador.....	Jan. 9.....	1	.....

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[illegible] since about the middle of January in all parts of the country from which reports have been received.

CIVIL SERVICE EXAMINATIONS OF INTEREST TO HEALTH OFFICIALS.

Supervisor, social hygiene (female)	$2,000–$2,500
Special agent, social hygiene (female)	1,200– 1,800
Assistant special agent, social hygiene (female)	600– 1,000

In developing the field activities of the campaign against venereal diseases the Public Health Service contemplates appointing about 40 special agents in social hygiene, 10 supervisors, and a number of assistant special agents. These positions are open to women only, and appointments will be for work in various parts of the United States.

The duties of the supervisors will be to represent the Section on Women and Girls of the Interdepartmental Social Hygiene Board in a supervisory capacity. The work will include the planning and organization of the work of special agents, promoting of community interest and social legislation, reporting on local conditions, collecting special data from time to time, and representing this section at conferences and public gatherings.

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The duties of the special agents will be to perform social case work with delinquent women and girls, to assist in securing the examination and treatment of those infected with venereal diseases, to aid in the enforcement of laws regarding commercialized vice, to visit places of amusement and report on conditions found. Appointees will also be required to compile community reports and case records of individuals dealt with. They must be capable of working without immediate supervision and must possess qualifications necessary to enlist the local community's interest and cooperation.

The duties of the assistant special agents, will be to perform social case work with delinquent women and girls similar to those performed by special agents, namely, assisting in securing the examination and treatment of those infected with venereal diseases, aiding in the enforcement of laws regarding commercialized vice, visiting public places of amusement and reporting on conditions found, etc.

These positions will be filled as the result of open competitive examinations conducted by the United States Civil Service Commission. The examinations will be held March 25 and 26, 1919.

For further information address the Civil Service Commission, Washington, D. C.

LETHARGIC ENCEPHALITIS.

A NOTIFIABLE DISEASE IN ENGLAND.

The attention of health officers is invited to the following instructive description of a new epidemic disease recently observed in Europe. It is desirable to know whether any such cases have been observed in this country, and if so, to what extent the disease prevails.

At a meeting of the Vienna psychiatric society, held in April, 1917, Von Economo described a group of cases of a disease occurring in epidemic form to which he gave the name "encephalitis lethargica." A discussion concerning the same disorder was held the following month by the Paris Academy of Medicine, and Prof. Netter there expressed the opinion that the disease was not a form of acute poliomyelitis. He also quoted some evidence in support of the view that the disease occurred at the end of the seventeenth and beginning of the eighteenth century in Germany and more definite evidence that it occurred in Upper Italy and Hungary in 1890. Very suggestive cases occurred in nearly all the countries of Europe and in the United States in the spring of 1895. From the data presented by Von Economo it is evident that the disease occurred in Vienna in the winter of 1916-17.

The first case noted in England occurred February 11, 1918, in Bermondsey, and the largest number of cases in one week was 18 in the last week in April. The number of cases declined thereafter

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hich never attained large proportions, came, at an end in June.

been made notifiable in England and Wales ethargic encephalitis." Early last year the local ith the assistance of the Medical Research Com- linical and pathological investigations. The ow been published in a report (N. S. 121) issued Office, London.

are abstracted from a review of the Government a recent number of the British Medical Journal, ments are hereby extended.

cute affection due to a specific virus, which, like r poliomyelitis, probably finds entrance through nd which, like it, has a special affinity for the gh for different areas and elements.

nargic encephalitis belongs to the class of polio- which are inflammatory in nature. Bacterio- did not yield any positive results.

se is a general infectious disease characterized ginating in the central nervous system, of which and characteristic are progressive lethargy or or about the nuclei of the third pair of cranial rise in temperature was not observed in all the se of which notes were obtained, there seems to here is always a certain amount of fever in an occasionally it may not be observed for several of symptoms. The common range is between , but temperatures up to 104° F. are not very few cases a temperature between 104° F. and ached. The pyrexia usually lasts from 2 to 5 ue for 10 or even 14. It may fall suddenly or tions. A period of subnormal temperature not

cases a prodromal period may be recognized, l defined, the symptoms being the early stage of ped disease. Usually the first symptom is junctivitis and in a smaller number of cases throat, and bronchial catarrhs were observed, tom observed in 80 per cent of the cases at this e lethargy. It might be ushered in suddenly or fit, but the onset was more often gradual. dazed or stupid, slept a great deal, and was marked cases the lethargy was accompanied by ids, pain in the eyes, blurred vision, and photo- ell-marked case, gradually passed into stupor.

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Headache was common, and giddiness was a highly characteristic early symptom, and in some cases was accompanied by diplopia. Mental hebetude was often associated with a highly emotional state, and the patient might exhibit, without apparent cause, symptoms which might be labeled hysterical. In other instances the mental depression was so great that melancholia was suspected. In a few cases only was the patient restless and irritable. The patient may be indisposed to speak, sometimes has distinct difficulty in articulation. The most frequent and characteristic signs in the prodromal period may be summed up as lethargy, asthenia, vertigo, headache, diplopia, and some alteration in the mental state.

After this prodromal period, if it occurs, the symptoms of a general infectious disease become manifest; the febrile reaction has already been mentioned. The patient lies in bed on the back, often unable to make any voluntary movement on account of great muscular weakness; the face is quite expressionless and masklike, and there may be definite double facial paralysis. The severest cases lie like a log in bed, resembling a waxen image in the lack of expression and mobility, and this may be accompanied by catalepsy. The patient is in a condition of stupor, although true sleep is often not obtained. Delirium, usually nocturnal, is not uncommon, and in addition to the muscular trouble there is distinct rigidity in a considerable proportion of cases. The voice becomes nasal and monotonous, sentences are uttered very slowly and words slurred into one another. Occasionally, however, once started to speak the patient chatters sentences with so great rapidity that he is often unintelligible. Irregular nonrhythmic spontaneous movements of the face, trunk, and limbs, resembling those seen in chorea or thalamic infections, are not infrequent. Cases occur which present the general symptoms of the disease—pyrexia, lethargy, asthenia—without localizing signs, and as a rule can only be diagnosed from the general surrounding circumstances. The commonest localizing sign is ophthalmoplegia, recognized in 75 per cent of the cases examined. Ptosis is the commonest form of third nerve paralysis and is usually at some stage bilateral. Finally, paralysis is usually bilateral, or becomes so, but is almost invariably more intense on one side than the other.

Dr. MacNalty recognizes seven types of cases—(*a*) A clinical affection of the third pair of nerves; (*b*) affections of the brain stem and bulb, (*c*) affections of the long tracts, (*d*) the ataxic type, (*e*) affections of the cerebral cortex, (*f*) cases with evidence of spinal cord involvement, and (*g*) the polyneuritic type in which affection of the peripheral nerves is suspected. The prognosis is better than the alarming state of the patient in the fully developed stage would suggest. Among 168 cases 37 deaths were recorded. The duration of the stupor is very variable; occasionally it lasts two to three days,

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e weeks, and in one case, which eventually re-
for eight weeks. It is too soon to speak
ects, but certain manifestations have persisted
three months from the date of onset; these are
ental condition, persistent cranial nerve palsy,
ralysis (apparently of spinal cord origin) and
osis may be very difficult, the lethargy and the
of the cranial nerve paralysis are the most
The frequency of ptosis, paralysis of the ocular
al paralysis, and ocular incoordination are the
ptic neuritis does not occur save in very occa-

Diagnosis.

error in diagnosis is to attribute the condition
itis; in many cases a differential diagnosis from
tis can not be made without an examination
uid, which is little, if at all, altered in the ma-
rgic encephalitis.
difficulties encountered have already been men-
al difficulty is to separate lethargic encephalitis
the cerebral form of infantile paralysis. The
lose, and it seems probable that some of the
past as cerebrospinal poliomyelitis may have
disease now newly recognized in this country
Nalty has arranged the chief criteria for diag-
is too long and detailed for reproduction here.
noted seem to be that, though the chief symp-
ephalitis have been described in cases reported
itis, they are slight, of much briefer duration,
lethargic encephalitis, on the other hand, has a
syndrome, characterized by progressive stupor
delirium, headache, giddiness, asthenia, mental
s, and, in the majority of cases, by paralysis of
al nerves. Paralysis, when present in lethargic
y bilateral and restricted to cranial nerves, but
d completely or is less in degree two months
these respects it presents a marked contrast

indications that in the present outbreak both
hargic encephalitis have occurred, but not in
other.
iders that the question of the identity or non-
seases is still open, but suggests that the relation
erhaps be comparable to that known to exist
paratyphoid fever.

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Treatment.

With regard to treatment, no specific method has been devised, and the best that can be done is to put the patient to bed and provide him with good nursing; cold sponging is often beneficial during the pyrexial period and tends to diminish the delirium. In many instances transient or permanent relief, with diminution of stupor, followed the withdrawal of cerebrospinal fluid by lumarb puncture, especially when the fluid was under pressure. For the pain, numbness, and tingling of the limbs warmth is the best remedy, and the bedclothes should be raised on frames. Constipation is obstinate and often difficult to overcome, except by enemata, followed by such drugs as liquid paraffin or phenolphthalein. No hypnotics and no morphine or other preparation of opium should be given, and Dr. MacNalty deprecates the administration of hexamine in large and repeated doses; if it is prescribed the urine should be carefully watched for albumin. Daily cleansing of the mouth and antiseptic treatment of the nose and mouth should be carried out, and respiratory complications systematically looked for. Finally, the patient should be given to understand that his convalescence will last for at least six months after the beginning of the illness.

ESTIMATES OF POPULATION—1910-1917.

STATES, TERRITORIES, COUNTIES AND CITIES OF THE UNITED STATES.

A bulletin which is certain to be appreciated by public health officials is one just published by the Bureau of the Census, giving the estimates of population of the United States, the States and territories, counties, and the cities which had a population of 8,000 or more on April 15, 1910. It is true that the figures presented are not in any sense a census; nevertheless in the convenient form in which they are presented their compilation will be very useful. The bulletin also includes the results of the State enumeration made in 1915.

Health officers will find this publication valuable in making comparative studies of health conditions.

DEATHS DURING WEEK ENDED FEBRUARY 8, 1919, IN CITIES.

The following table shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended February 8, 1919. The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown.

The data are taken from the "Weekly Health Index," February 11, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.

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l death rates per 1,000 population in certain large cities of nded Feb. 8, 1919—Deaths from all causes, and from pneu- fluenza combined.

	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Death rate for preceding years.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual rate per 1,000.
.....	112,565	39	18.1	C 17.6	15	6.9
.....	201,732	85	22.0	C 20.2	.....	.....
.....	[2] 669,981	364	28.3	A 20.2	126	9.8
.....	197,670	63	16.6	A 16.9	21	5.5
.....	785,245	301	20.0	A 17.4	89	5.9
.....	473,229	201	22.1	C 20.5	75	8.3
.....	111,432	50	23.4	C 22.9	10	4.7
.....	2,596,681	803	16.1	A 16.1	194	3.9
.....	418,022	150	18.7	C 19.6	39	4.9
.....	810,306	249	16.0	C 13.0	100	6.4
.....	225,296	60	13.9	C 15.0	11	2.5
.....	130,655	42	16.8	C 21.6	8	3.2
.....		97	.....	.....	.....	.....
.....	128,392	45	18.3	C 14.2	17	6.9
.....	135,450	28	10.8	C 15.4	.....	.....
.....	289,577	112	20.2	C 17.1	.....	.....
.....	318,770	114	18.6	C 12.9	.....	.....
.....	313,785	115	19.1	C 20.3	40	6.6
.....	568,495	183	16.8	A 15.3	47	4.3
.....	242,707	93	20.0	C 26.0	19	4.1
.....	109,081	41	19.6	A 17.1	.....	.....
.....	154,759	101	34.0	C 25.3	60	20.2
.....	453,481	100	11.5	A 13.6	.....	.....
.....	383,442	111	15.1	C 10.7	.....	.....
.....	119,215	56	24.5	C 21.0	15	6.6
.....	428,684	147	17.9	C 15.4	45	5.5
.....	154,865	41	13.8	C 18.5	12	4.0
.....	382,273	197	26.9	A 22.1	58	7.9
.....	5,215,879	2,209	22.1	C 17.7	893	8.9
.....	214,206	63	15.3	A 12.9	.....	.....
.....	180,264	33	9.5	C 11.0	.....	.....
.....	1,761,371	750	22.2	[3] 17.9	262	7.8
.....	593,303	288	25.3	C 20.4	145	12.7
.....		62	.....	.....	15	.....
.....	263,613	98	19.4	C 17.0	30	5.9
.....	160,719	60	19.5	C 19.1	11	3.6
.....	264,856	81	15.9	C 15.6	16	3.1
.....	779,951	243	16.2	C 16.5	53	3.5
.....	257,699	63	12.7	C 10.7	.....	.....
.....	478,530	147	16.0	C 14.6	41	4.5
.....	.....	90	.....	.....	40	.....
.....	.....	24	.....	.....	.....	.....
.....	161,404	44	14.2	C 16.2	10	3.2
.....	262,234	57	11.3	A 12.7	6	1.2
.....	401,681	150	19.5	A 18.8	42	5.5
.....	173,650	76	22.8	C 17.1	21	6.3

iven is the average annual death rate per 1,000 population for the corre- to 1917, inclusive. "C" indicates that the rate is the annual death rate sponding week of 1918.
ly 1, 1919.
1915, 1916, and 1917.

ETICUS OR MOUSE FAVUS IN MAN.

Bacteriologist, Hygienic Laboratory, United States Public Health Service.

avus herpeticus in man has recently assumed the United States because of the possibility e imported Australian wheat, or are engaged in ne infected from the bags, dead mice, or possibly f. Men employed in resacking the grain and ending the torn and gnawed bags have developed

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many cases of favus of the glabrous skin, the *Favus herpeticus* of Quincke, caused by the dermatophyte *Achorion quinckeanum*. It may be emphasized that this fungus is quite distinct from that typical of human favus, the *Achorion Schönleinii*.

A study, made at the Hygienic Laboratory of the United States Public Health Service, of samples of wheat and of several mouse skins collected in Australia proved negative. The descriptions and figures presented by Australian physicians, however, leave no question that the disease present in Australia is favus.

It is not improbable that there may be an occasional appearance of mouse favus, or rather *Favus herpeticus*, among those handling the imported wheat. The possibility that the spores may be present in flour and cause infection in bakers is very remote and probably negligible.

The disease in man develops clinically much as *Herpes tonsurans*, but in most cases well developed cup-shaped crusts or scutula appear near the center of the lesion. The infection in man is usually not serious, yielding readily to treatment, and far more readily cured than the *Favus vulgaris* of the scalp.

There are apparently no reports of cases in the United States in recent years.

It is not probable that the danger from infection through importation of Australian wheat is sufficiently great to warrant any interference with, certainly not to warrant the exclusion of, the grain.

THE NOTIFIABLE DISEASES.

PREVALENCE DURING 1917 IN STATES.

ANTHRAX, CEREBROSPINAL MENINGITIS, DIPHTHERIA, MALARIA, MEASLES, POLIOMYELITIS, RABIES IN MAN, ROCKY MOUNTAIN SPOTTED FEVER, SCARLET FEVER, SEPTIC SORE THROAT, SMALLPOX, TUBERCULOSIS (PULMONARY AND ALL FORMS), TYPHOID FEVER, AND TYPHUS FEVER CASES, AND DEATHS REPORTED, 1917; AVERAGE NUMBER OF CASES REPORTED DURING RECENT YEARS (1912 to 1916); CASE RATES, FATALITY AND MORTALITY RATES, 1917.

The tables which appear on the following pages have been compiled from data furnished by the health officers of the several States in response to requests from the United States Public Health Service.

Thirty-six States, Hawaii, Porto Rico, and the District of Columbia filled out and returned the schedules, viz: Alabama, Arkansas, California, Colorado, Connecticut, District of Columbia, Hawaii, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nevada, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Porto Rico, Rhode Island, South Carolina, South Dakota, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

The populations used in computing the case rates and death rates were those estimated by the Bureau of the Census as of July 1, 1917,

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lation of Iowa. For this State the population in
l by the census of that year, was used, as no
as available.

preceding years were obtained by adding together
ears 1912, 1913, 1914, 1915, and 1916 and dividing
a for the full five years were not available for
. The column headed "Averages are for —"
f years for which the figures were obtainable. In
rage figures are for years between 1912 and 1916,

figures for 1917 with the averages for preceding
borne in mind that an increase in the number of
indicate that there were more cases of the
the State during 1917, or it may indicate that
reported by the physicians.

number of reported cases of a communicable dis-
a high case rate (and more especially when accom-
ly small number of deaths, as indicated by a low
y means that the health department of that State
e cases of the disease are being well reported by
icians. It does not necessarily mean that the
alent in that State than in other States. A high
ean that the disease was unusually virulent in a
cians did not treat the disease in that State with
ewhere, or that the practicing physicians did not
cases. On the other hand, an unusually low
due to the fact that the disease in the State was
the physicians treated it with unusual success,
physicians reported their cases satisfactorily, or
of death was incomplete, or the assignment of
naccurate.

RABIES IN MAN.

Cases and Deaths, 1917.

State.	Estimated population, July 1, 1917.	Cases.	Deaths.
.....	2,363,939	1	1
.....	988,320	2	2
.....	1,265,373	3	3
.....	6,234,995	3	3
.....	2,835,492	1	2
.....	1,866,954	4	4
.....	2,312,445	2	2
.....	3,014,194	3	3
.....	10,460,182	2	5
.....	5,212,085	3	4
.....	8,660,042	3	3
.....	1,648,205	.....	6
.....	4,515,423	.....	2
.....	2,527,167	3	3

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Alabama	1	1	1	1	0	0	
Arkansas	4	11	2	3	5	6	4
California	3	6	3	12	2	4	2
Connecticut	0	1	(1)	1	(1)	0	(1)
District of Columbia	(1)	1	(1)	0	(1)	2	0
Hawaii	13	36	16	37	10	36	13
Illinois	2	4	3	4	4	2	2
Indiana	1	3	0	6	4	6	2
Iowa	2	4	4	6	3	5	1
Kansas	(1)	0	(1)	0	2	2	2
Louisiana		0		1		0	
Maine	5	2	3	4	3	4	2
Maryland	10	19	15	8	11	11	12
Massachusetts	3	6	1	6	2	5	2
Minnesota	1	0	4	5	3	6	4
Mississippi	2	0	1	1	1	1	(1)
Montana	(1)	0	(1)	0	(1)	0	1
Nevada		15		4		3	
New Jersey	24	22	27	28	27	17	18
New York	12	26	8	22	14	25	15
Ohio	0	2	0	2	0	1	1
Oregon	25	41	15	25	8	31	11
Pennsylvania		0		0		0	
Perto Rico	2	3	1	1	2	5	2
Rhode Island	1	0	1	2	(1)	1	(1)
South Carolina	0	3	1	0	0	6	0
South Dakota	3	1	4	1	0	1	1
Texas	0	0	0	0	0	0	0
Vermont	14	9	18	8	14	4	8
Virginia	1	1	1	0	2	3	(1)
Washington		1		1		0	
West Virginia	7	9	4	11	6	13	6
Wisconsin	(1)	1	0	0	0	0	(1)
Wyoming							

[1] Less than 1.

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State.	Estimated population July 1, 1917.	Averages are for—	January.		February.		
			Average.	1917	Average.	1917	A
Alabama	2,363,939	3 years	35	59	29	36	
Arkansas	1,766,343	.....	.....	29	.....	10	...
California	3,023,032	4 years	251	354	219	316	
Colorado	988,320	2 years	41	35	41	27	
Connecticut	1,265,373	5 years	254	222	192	179	
District of Columbia	369,282	5 years	63	61	40	48	
Hawaii	219,580	5 years	15	17	15	14	
Illinois	6,234,995	3 years	1,230	1,316	821	1,092	
Indiana	2,835,492	5 years	320	409	243	257	
Iowa	2,224,771	4 years	80	45	74	35	
Kansas	1,851,870	5 years	114	170	95	80	
Louisiana	1,856,954	3 years	125	75	81	67	
Maine	777,340	1916	35	28	22	18	
Maryland	1,373,673	2 years	262	181	196	134	
Massachusetts	3,775,973	3 years	662	869	599	783	
Michigan	3,094,266	4 years	463	645	339	533	
Minnesota	2,312,445	5 years	281	261	229	228	
Mississippi	1,976,570	3 years	79	76	53	56	
Montana	472,935	4 years	15	19	15	18	
Nevada	110,738	2 years	0	2	(1)	0	
New Jersey	3,014,194	5 years	611	483	506	423	
New York	10,460,182	5 years	2,062	1,744	1,928	1,715	1
North Dakota	765,319	.....	.....	33	.....	36	...
Ohio	5,212,085	3 years	909	681	702	490	
Oklahoma	2,289,855	3 years	138	64	80	69	
Oregon	861,992	5 years	38	15	29	3	
Pennsylvania	8,660,042	2 years	1,319	1,503	1,028	1,257	
Porto Rico	1,231,880	2 years	18	9	12	12	
Rhode Island	625,865	2 years	119	99	108	93	
South Carolina	1,643,205	4 years	97	96	82	116	
South Dakota	716,972	2 years	34	30	17	35	
Texas	4,515,423	1915	140	173	96	123	
Utah	443,866	4 years	37	28	31	17	
Vermont	364,046	3 years	44	37	24	35	
Virginia	2,213,025	5 years	259	251	252	148	
Washington	1,597,400	4 years	54	25	45	22	
West Virginia	1,412,602	.....	.....	82	.....	55	...
Wisconsin	2,527,167	4 years	261	231	153	223	
Wyoming	184,970	4 years	2	5	4	8	

Digitized by Google

State.	Estimated population July 1, 1917.	January.		February.	
		Cases.	Deaths.	Cases.	Dea
Alabama	2,363,939	51	11	18	
Arkansas	1,766,343	159	30	239	
California	3,029,032	15	0	17	
Colorado	988,320	0	0	1	
Illinois	6,234,995	60	3	81	
Kansas	1,851,870	1	0	1	
Louisiana	1,856,954	36	25	53	
Maryland	1,373,673	3	0	1	
Massachusetts	3,775,973	1	0	2	
Minnesota	2,312,445	0	0	0	
Mississippi	1,976,570	4,814	18	4,473	
New Jersey	3,014,194	0	0	3	
Ohio	5,212,085	0	0	1	
Pennsylvania	8,660,042	0	3	0	
Porto Rico	1,231,880	30	193	48	1
South Carolina	1,643,205	40	11	13	
Virginia	2,213,025	379	.....	276	.....
Wisconsin	2,527,167	0	0	0	

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Illinois	102	21	121	15	11	1
Kansas	7	2	7	1	4	
Louisiana	317	49	268	74	199	5
Maryland	14	2	9	0	6	
Massachusetts	13	0	12	0	7	
Minnesota	0	1	0	0	0	
Mississippi	28,234	140	25,435	203	15,079	14
New Jersey	28	1	19	1	9	
Ohio	5	3	6	5	1	
Pennsylvania	1	2	4	0	1	
Porto Rico	11	157	143	123	455	16
South Carolina	134	45	290	65	108	4
Virginia	1,181	.....	1,051	.....	628	.....
Wisconsin	0	0	0	0	0	

[1] Most of these cases occurred earlier in the yea

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State.	Estimated population July 1, 1917.	Averages are for—	January.		Febru
			Aver-age.	1917	Aver-age.
Alabama	2,363,939	2 years	7	781	75
Arkansas	1,766,343			891	
California	3,029,032	4 years	604	1,606	789
Colorado	988,320	2 years	259	655	421
Connecticut	1,265,373	5 years	601	633	728
District of Columbia	369,282	5 years	198	89	391
Hawaii	219,580	5 years	73	12	58
Illinois	6,234,995	3 years	2,035	4,959	2,649
Indiana	2,835,492	3 years	593	4,145	1,240
Kansas	1,851,870	5 years	198	972	742
Louisiana	1,856,954	3 years	43	4,047	46
Maine	777,340	1916	8	112	22
Maryland	1,373,673	2 years	556	801	886
Massachusetts	3,775,973	3 years	2,308	1,886	2,903
Michigan	3,094,266	4 years	730	508	985
Minnesota	2,312,445	5 years	265	295	522
Mississippi	1,976,570	3 years	394	3,008	934
Montana	472,935	4 years	317	515	258
Nevada	110,738	2 years	24	129	33
New Jersey	3,014,194				
New York	10,460,182	5 years	4,963	3,391	6,097
North Dakota	765,319			131	
Ohio	5,212,085	3 years	2,158	2,934	3,452
Oklahoma	2,289,855	3 years	45	580	194
Oregon	861,992	5 years	173	695	205
Pennsylvania	8,660,042	2 years	6,644	4,245	7,876
Porto Rico	1,231,880			112	
Rhode Island	625,865	2 years	159	48	122
South Carolina	1,643,205	4 years	176	1,373	352
South Dakota	716,972	2 years	226	124	216
Texas	4,515,423			574	
Utah	443,866	4 years	587	5,406	789
Vermont	364,946	3 years	68	863	81
Virginia	2,213,025	2 years	807	3,388	1,043
Washington	1,597,400	4 years	325	4,099	469
West Virginia	1,412,602			1,197	
Wisconsin	2,527,167	4 years	964	256	1,045
Wyoming	184,970	4 years	33	75	62

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District of Columbia	4	4	3	6	2	2	
Hawaii	(1)	0	0	0	(1)	0	(1)
Illinois	46	87	61	324	43	266	
Indiana	21	17	21	10	18	12	
Iowa	28	21	28	91	16	22	
Kansas	13	20	10	23	15	7	
Louisiana	4	0	2	2	1	1	
Maine	15	1	56	0	42	3	
Maryland	44	25	55	19	62	7	
Massachusetts	113	38	257	16	270	11	
Michigan	53	8	59	10	37	16	
Minnesota	75	13	53	13	26	6	
Mississippi	16	5	11	1	7	4	
Montana	9	7	11	3	7	7	
New Jersey	430	11	199	8	58	4	
New York	1,231	59	534	39	203	15	
North Dakota		7		5		11	
Ohio	94	93	103	76	54	31	
Oklahoma	2	1	5	2	5	2	
Oregon	(1)	4	2	3	8	7	
Pennsylvania	389	139	422	121	209	72	
Rhode Island		1		3		2	
South Carolina	20	0	8	1	4	1	
South Dakota	2	7	1	10	2	7	
Texas	0	1	4	1	0	0	
Vermont	32	43	58	29	31	9	
Virginia	31	85	33	43	27	29	
West Virginia		72		59		16	
Wisconsin	47	6	49	6	28	13	
Wyoming	2	0	3	0	0	0	

[1] Less th

Digitized by Google

State.	Estimated population July 1, 1917.	Averages are for—	January.		February.		A a
			Average.	1917	Average.	1917	
Alabama	2,363,939	3 years	31	101	37	37	
Arkansas	1,766,343			27		12	
California	3,029,032	4 years	304	606	260	622	
Colorado	988,320	2 years	155	87	158	90	
Connecticut	1,265,373	5 years	245	132	214	116	
District of Columbia	369,282	5 years	65	58	65	43	
Hawaii	219,580	5 years	1	0	(1)	0	
Illinois	6,234,995	3 years	1,433	2,476	1,334	2,660	1
Indiana	2,835,492	4 years	580	490	555	548	
Iowa	2,224,771	4 years	131	112	158	149	
Kansas	1,851,870	5 years	177	258	186	403	
Louisiana	1,856,954	3 years	16	16	12	14	
Maine	777,340	1916	6	13	13	13	
Maryland	1,373,673	2 years	359	154	266	131	
Massachusetts	3,775,973	3 years	854	672	761	597	
Michigan	3,094,266	4 years	487	1,518	481	1,602	
Minnesota	2,312,445	5 years	444	366	487	343	
Mississippi	1,976,570	3 years	38	29	52	31	
Montana	472,935	4 years	67	121	58	74	
Nevada	110,738	2 years	28	12	23	6	
New Jersey	3,014,194	5 years	583	542	550	581	
New York	10,460,182	5 years	1,840	1,450	1,962	1,706	2
North Dakota	765,319			37		62	
Ohio	5,212,085	3 years	1,100	1,220	947	1,066	
Oklahoma	2,289,855	3 years	163	122	129	317	
Oregon	861,992	5 years	49	122	48	110	
Pennsylvania	8,660,042	2 years	872	941	807	824	
Porto Rico	1,231,880	1914	2	0	0	0	
Rhode Island	625,865	2 years	115	64	97	48	
South Carolina	1,643,205	4 years	20	14	12	4	
South Dakota	716,972	2 years	57	82	70	101	
Texas	4,515,423	1915	85	160	142	110	
Utah	443,866	4 years	129	321	141	307	
Vermont	364,946	3 years	49	86	31	239	
Virginia	2,213,025	4 years	254	165	183	128	
Washington	1,597,400	4 years	85	120	78	98	
West Virginia	1,412,602			70		47	
Wisconsin	2,527,167	4 years	360	730	289	924	
Wyoming	184,970	4 years	15	10	22	13	

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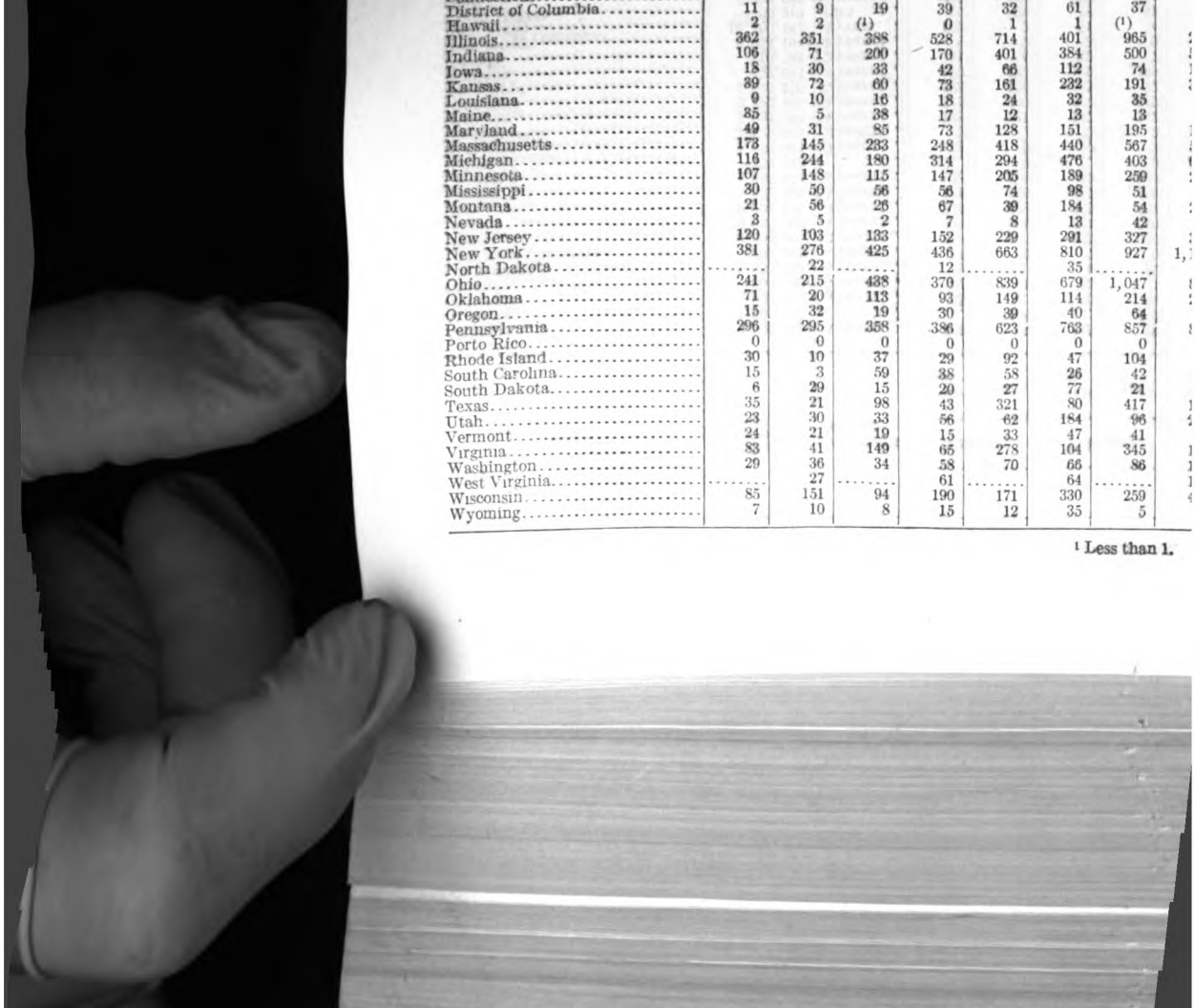
District of Columbia	11	9	19	39	32	61	37	
Hawaii	2	2	(1)	0	1	1	(1)	
Illinois	362	351	388	528	714	401	965	
Indiana	106	71	200	170	401	384	500	
Iowa	18	30	33	42	66	112	74	
Kansas	39	72	60	73	161	232	191	
Louisiana	9	10	16	18	24	32	35	
Maine	35	5	38	17	12	13	13	
Maryland	49	31	85	73	128	151	195	
Massachusetts	173	145	233	248	418	440	567	
Michigan	116	244	180	314	294	476	403	
Minnesota	107	148	115	147	205	189	259	
Mississippi	30	50	56	56	74	98	51	
Montana	21	56	26	67	39	184	54	
Nevada	3	5	2	7	8	13	42	
New Jersey	120	103	133	152	229	291	327	
New York	381	276	425	436	663	810	927	1,
North Dakota		22		12		35		
Ohio	241	215	438	370	839	679	1,047	
Oklahoma	71	20	113	93	149	114	214	
Oregon	15	32	19	30	39	40	64	
Pennsylvania	296	295	358	386	623	763	857	
Porto Rico	0	0	0	0	0	0	0	
Rhode Island	30	10	37	29	92	47	104	
South Carolina	15	3	59	38	58	26	42	
South Dakota	6	29	15	20	27	77	21	
Texas	35	21	98	43	321	80	417	
Utah	23	30	33	56	62	184	96	
Vermont	24	21	19	15	33	47	41	
Virginia	83	41	149	65	278	104	345	
Washington	29	36	34	58	70	66	86	
West Virginia		27		61		64		
Wisconsin	85	151	94	190	171	330	259	
Wyoming	7	10	8	15	12	35	5	

[1] Less than 1.



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State.	Estimated population July 1, 1917.	Averages are for—	January.		Februa
			Aver-age.	1917	Aver-age.
Alabama	2,363,939	3 years	106	73	115
Arkansas	1,766,343	.....	.....	156	.....
California	3,029,032	4 years	75	40	76
Colorado	988,320	3 years	34	1	33
Connecticut	1,265,373	4 years	6	90	9
District of Columbia	369,282	4 years	11	0	7
Illinois	6,234,995	2 years	378	556	325
Indiana	2,835,492	4 years	304	498	371
Iowa	2,224,771	3 years	346	193	338
Kansas	1,851,870	4 years	186	126	217
Louisiana	1,856,954	3 years	93	155	82
Maine	777,340	.....	.....	0	.....
Maryland	1,373,673	2 years	13	0	10
Massachusetts	3,775,973	2 years	5	2	3
Michigan	3,094,266	4 years	188	191	157
Minnesota	2,312,445	4 years	315	200	279
Mississippi	1,976,570	3 years	223	196	265
Montana	472,935	3 years	109	193	102
Nevada	110,738	2 years	51	4	19
New Jersey	3,014,194	4 years	8	2	3
New York	10,460,182	4 years	109	2	91
North Dakota	765,319	1913	16	28	18
Ohio	5,212,085	4 years	426	199	370
Oklahoma	2,289,855	2 years	614	222	420
Oregon	861,992	4 years	82	13	84
Pennsylvania	8,660,042	1916	9	13	5
Porto Rico	1,231,880	.....	.....	1	.....
South Carolina	1,643,205	4 years	77	6	51
South Dakota	716,972	2 years	130	91	171
Texas	4,515,423	2 years	285	132	282
Utah	443,866	3 years	256	40	233
Vermont	364,946	4 years	24	0	16
Virginia	2,213,025	4 years	293	72	226
Washington	1,597,400	4 years	121	52	89
West Virginia	1,412,602	.....	.....	5	.....
Wisconsin	2,527,167	4 years	333	92	257
Wyoming	184,970	4 years	10	1	21

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Maryland	324	274	284	240	222	2
Massachusetts	624	693	622	634	532	6
Minnesota	392	346	304	440	342	3
Montana	27	15	44	18	25	
Nevada	.....	4	.....	3	.....	
New York	2,409	2,714	2,268	1,905	2,050	2,3
North Dakota	.....	17	.....	11	.....	
Rhode Island	86	37	71	61	70	
South Carolina	.....	12	.....	17	.....	
South Dakota	.....	12	.....	7	.....	
Utah	.....	4	.....	7	.....	
Vermont	44	8	21	11	16	
Washington	120	27	75	115	70	
West Virginia	.....	32	.....	25	.....	

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State.	Estimated population July 1, 1917.	January.		February	
		1916	1917	1916	19
Arkansas	1,766,343	.....	32	.....	
California	3,029,032	601	683	566	
Connecticut	1,265,373	.....	137	.....	
District of Columbia	369,282	79	88	87	
Hawaii	219,580	100	87	120	
Illinois	6,234,995	.....	113	.....	1,
Indiana	2,835,492	.....	330	.....	
Kansas	1,851,870	103	154	136	
Louisiana	1,856,954	.....	23	.....	
Maine	777,340	.....	52	.....	
Massachusetts	3,775,973	716	773	728	
Michigan	3,094,266	264	540	579	
Minnesota	2,312,445	362	458	376	
Mississippi	1,976,570	.....	513	.....	
New Jersey	3,014,194	834	785	735	
New York	10,460,182	2,398	2,997	2,694	2,
North Dakota	765,319	.....	6	.....	
Ohio	5,212,085	538	517	593	
Oklahoma	2,289,835	.....	54	.....	
Oregon	861,992	50	36	47	
Pennsylvania	8,660,042	1,136	1,036	941	
Porto Rico	1,231,880	.....	59	.....	
Rhode Island	625,863	75	61	63	
South Dakota	716,972	.....	13	.....	
Texas	4,515,423	.....	147	.....	
Virginia	2,213,025	352	290	297	
West Virginia	1,412,602	.....	35	.....	
Wisconsin	2,527,167	178	163	119	

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Hawaii	48	88	56	68	63	
Illinois	.....	1,258	.....	1,245	.....	4
Indiana	.....	304	.....	273	.....	2
Kansas	146	115	109	105	73	1
Louisiana	.....	127	.....	122	.....	1
Maine	.....	34	.....	43	.....	
Massachusetts	687	760	674	691	578	7
Michigan	846	282	695	79	604	2
Minnesota	427	390	324	465	379	4
Mississippi	.....	652	.....	592	.....	5
New Jersey	638	696	520	564	652	6
New York	2,457	2,758	2,303	1,939	2,093	2,3
North Dakota	.....	19	.....	16	.....	
Ohio	407	477	383	466	378	4
Oklahoma	.....	32	.....	33	.....	
Oregon	34	61	31	42	34	
Pennsylvania	1,010	1,099	859	731	744	8
Porto Rico	.....	66	.....	99	.....	1
Rhode Island	90	43	79	67	75	
South Dakota	.....	14	.....	7	.....	1
Texas	.....	103	.....	19	.....	1
Virginia	287	290	317	269	234	1
West Virginia	.....	33	.....	25	.....	2
Wisconsin	152	274	88	126	101	1

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Colorado							
Connecticut	161	73	166	126	105	71	
District of Columbia	82	68	71	81	49	54	
Hawaii	15	7	15	24	14	108	
Illinois	506	405	661	637	651	193	
Indiana	574	366	448	570	370	246	
Kansas	309	493	275	540	263	492	
Louisiana	85	239	67	134	92	153	
Maine	50	13	76	19	32	22	
Maryland	581	473	602	606	431	361	
Massachusetts	319	246	392	264	289	246	
Michigan	301	168	350	212	277	179	
Minnesota	167	62	188	106	182	118	
Mississippi	1,066	970	792	890	665	574	
Montana	60	32	76	45	71	63	
Nevada	25	14	33	12	24	17	
New Jersey	274	201	303	259	230	164	
New York	781	558	994	867	830	541	
North Dakota		20		34		39	
Ohio	616	517	858	684	663	413	
Oklahoma	430	176	337	264	262	296	
Oregon	36	24	30	53	42	87	
Pennsylvania	959	691	1,381	1,025	1,430	673	
Porto Rico	34	18	47	26	31	17	
Rhode Island	35	44	44	24	54	24	
South Carolina	176	40	157	105	80	46	
South Dakota	16	9	31	8	28	31	
Texas	129	149	116	175	147	223	
Utah	92	63	133	121	104	87	
Vermont	34	12	45	20	47	14	
Virginia	997	957	734	644	545	307	
Washington	119	126	137	139	104	171	
West Virginia		329		298		165	
Wisconsin	51	36	57	43	80	47	
Wyoming	8	9	10	18	7	18	

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Mumps	1
Pneumonia	2
Scarlet fever	4
Smallpox	35
Syphilis	39
Tuberculosis	10
Whooping cough	3

GULFPORT H[illegible]STRICT, MISS.

Cerebrospinal menin[illegible]	
Bay St. Louis	1
Chicken pox:	
De Lisle	4
Dysentery:	
Gulfport	1
Gonorrhea:	
Biloxi	1
Gulfport	1
Lyman	1
Moss Point	3
Influenza:	
Bay St. Louis	4
Biloxi	20
Escatawpa	1
Gautier	1
Gulfport	16
Handsboro	5
Kreole	1
Latimer	3
Lizana	1
Long Beach	5
Lyman	1
Mississippi City	2
Moss Point	18
Pascagoula	8
Pass Christian	1
Sellers	3
Wade	1
Malaria:	
Bay St. Louis	2
Gulfport	1
Moss Point	1
Pascagoula	1
Measles:	
Lyman	4

CAMP HANCOCK ZONE, GA.

Augusta:	
Influenza	3
Typhoid fever	1

CAMP HUMPHREYS ZONE, VA.

Chicken pox:	
Alexandria	6
Fredericksburg	1
Gonorrhea:	
Alexandria	1
Influenza:	
Alexandria	43
Alexandria County	7
Fairfax County	16
Fredericksburg	32
Measles:	
Alexandria	1
Fredericksburg	2
Mumps:	
Fredericksburg	4
Pneumonia:	
Alexandria	7
Tonsilitis:	
Alexandria	4
Tuberculosis, pulmonary:	
Alexandria	1
Whooping cough:	
Fredericksburg	4

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	1
Influenza	27
Measles	2
Meningitis	1
Mumps	2
Pneumonia	2
Tuberculosis	1
Typhoid fever	1
Whooping cough	2
Government clinic:	
Gonorrhea	1
Syphilis	12

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	5
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	13
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	1

NE, ALA.

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	1

E, N. J.

	5
	1
	1
	37
	1
	1

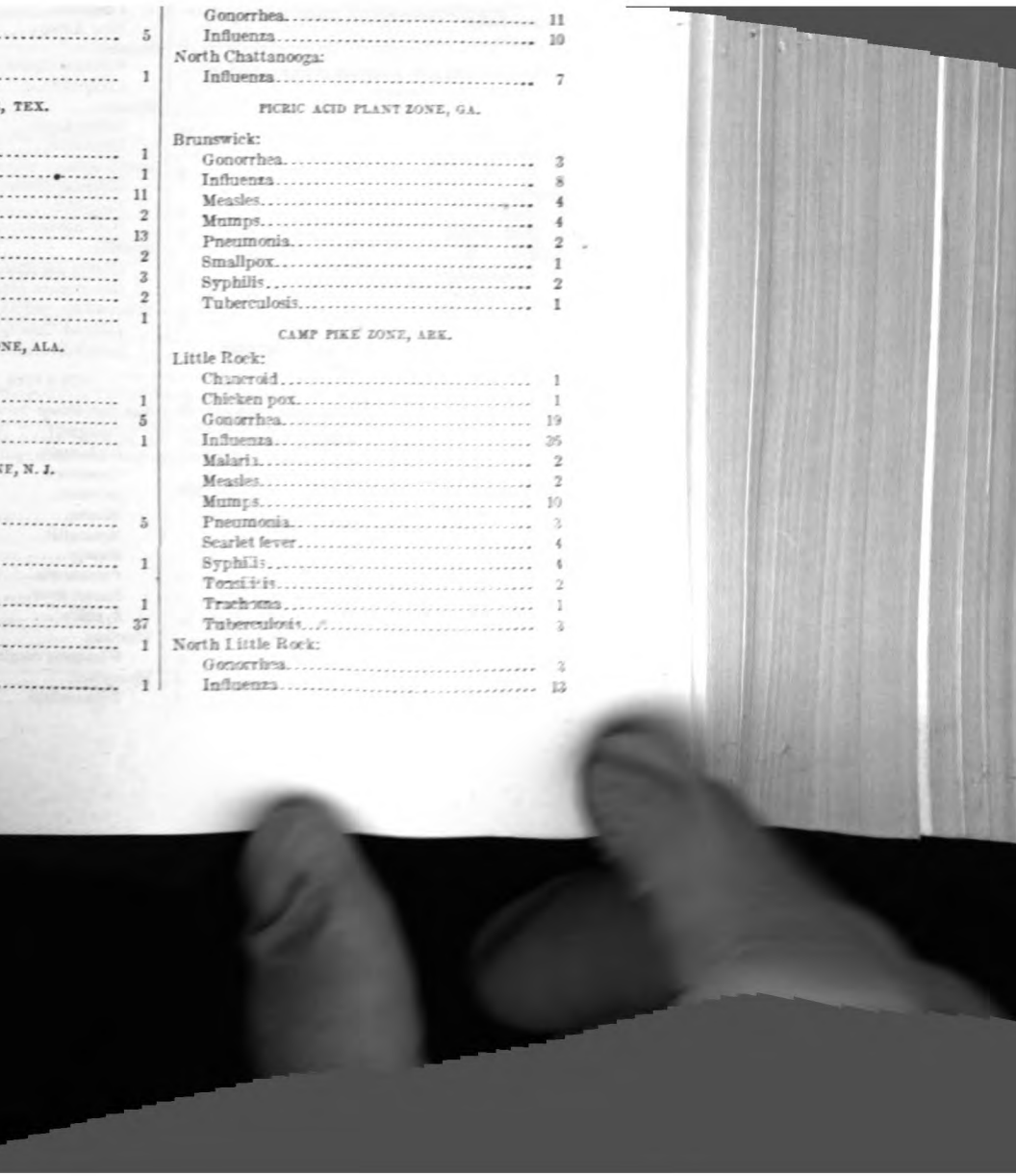
Gonorrhea	11
Influenza	10
North Chattanooga:	
Influenza	7

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	3
Influenza	8
Measles	4
Mumps	4
Pneumonia	2
Smallpox	1
Syphilis	2
Tuberculosis	1

CAMP PIKE ZONE, ARK.

Little Rock:	
Chancroid	1
Chicken pox	1
Gonorrhea	19
Influenza	35
Malaria	2
Measles	2
Mumps	10
Pneumonia	3
Scarlet fever	4
Syphilis	4
Tonsilitis	2
Trachoma	1
Tuberculosis	3
North Little Rock:	
Gonorrhea	3
Influenza	13



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Raleigh	1
Wake County	1
Tuberculosis:	
Durham	1

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Influenza:	
Norfolk	28
Pneumonia:	
Norfolk	2
Smallpox:	
Norfolk	1
Portsmouth	1
Syphilis:	
Portsmouth	1
Typhoid fever:	
Norfolk	1

PORTSMOUTH-KITTERY SANITARY DISTRICT, N. H. AND ME.

Gonorrhea:	
Portsmouth	1

CAMP SEVIER ZONE, S. C.

Influenza:	
Greenville and vicinity	226

CAMP SHERIDAN ZONE, ALA.

Government Clinic:	
Chancroid	3
Gonorrhea	8
Syphilis	15
Montgomery:	
Chancroid	1
Scarlet fever	2
Syphilis	1

Jefferson County	
Louisville	
New Albany	
Measles:	
Jefferson County	
Louisville	
Mumps:	
Jeffersonville	
Louisville	
Scarlet fever:	
Jefferson County	
Louisville	
New Albany	1
Syphilis:	
County jail clinic	9
Government clinic	34
Tuberculosis, pulmonary:	
Jefferson County	1
Louisville	9

TIDEWATER HEALTH DISTRICT, VA.

Newport News:	
Chancroid	1
Diphtheria	2
Gonorrhea	6
Influenza	10
Measles	1
Meningitis	1
Mumps	10
Pneumonia	1
Scarlet fever	2
Syphilis	3
Phoebus:	
Whooping cough	1
Riverview:	
Tuberculosis	1

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	Current weeks.	Last weeks.
ıses)	1,016.87	1,033.33
	1,210.09	1,154.34
	939.31	982.84
se only)	814.58	831.44
	994.13	884.45
eport	743.09	767.39
	50.92	50.77
	54.96	49.97
	49.17	51.10
es)	15.50	13.47
	12.74	12.01
only)	16.48	14.07
	9.26	7.95
s	11.89	10.89
	8.22	6.72

ps in the United States will continue to be relatively high, as the numer-
l States continues to decline from week to week as a result of demobiliza-
or discharge, while the sick and otherwise disabled are retained in service
inued influx of sick and wounded (properly chargeable to commands
g to increase rates in the United States and to diminish correspondingly

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	13,973	2	2	7.44	7.44
	13,891	2	2	7.48	7.48
	5,253	0			
	30,623	8	7	13.53	11.80
	5,774	0			
	7,996	0			
	42,731	10	8	12.16	10.95
	12,376	0			
	41,142	10	7	12.63	11.37
	30,454	16	16	27.32	27.32
	24,871	7	7	14.63	14.63
	107,558	39	39	18.84	18.84
	668,981	164	153	12.74	11.89

l admission rate per 1,000 for certain diseases.

isease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
	17.10	27.35	25.64	21.92
	0.62	0.0	1.11	0.37
	0.69	0.83	0.11	0.40
	59.93	60.19	36.34	32.18
	0.0	0.0	0.35	0.31
	0.07	0.20	2.02	2.46
	8.86	8.26	1.46	1.27
	0.62	0.97	1.79	1.91
	7.30	4.85	1.08	1.10
	56.59	65.19		

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CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended February 15, 1919.

Alabama.—State totals: Typhoid fever 3, smallpox 12, scarl fever 7, diphtheria 6, influenza 270.

Arkansas.—State totals: Influenza 303, scarlet fever 3, malaria 1 diphtheria 1, smallpox 21, measles 28, typhoid fever 2, pellagra 2.

California.—Influenza cases 640. Smallpox 27; Los Angel County 1, Tulare County 14, Santa Cruz County 1, San Bernardi County 1, Orange County 3, Kern County 1, Los Angeles City San Francisco 4. One case poliomyelitis reported from San Mat City. Typhoid fever 5; Lompoc 1, Riverside City 2, Riversi County 2. One case cerebrospinal meningitis reported from S Francisco.

Connecticut.—No outbreak or unusual prevalence. Total cases influenza 161.

Florida.—State totals: Scarlet fever 5, diphtheria 10, meningitis Only 55 cases of influenza reported.

Illinois.—Diphtheria 198; of which in Chicago 156. Scarlet fev 152; of which in Chicago 67, Mount Sterling 28. Smallpox 63, which in Arlington Heights 11, Pekin, 10, Rockford 8, Peoria Schram City 5. Meningitis in Chicago 1. Poliomyelitis in Chicag 1. Gonorrhea 107, syphilis 47, influenza 1,160 of which in Chicag 554. Influenza recrudescence noted in following Illinois commun ties: Payson 24, Robinson Township (Crawford County) 16, Albi precinct (Edwards County) 48, Salem precinct (Edwards County) 2 Bowling Green Township (Fayette County) 31, Galesburg 27, Macon 24, Rock Creek precinct (Menard County) 15, Jonesboro 17, Albany 1

Indiana.—Scarlet fever: Epidemic at Greenfield, Columbia Cit South Whitley, Corunna, Logansport, Tipton. Smallpox: Prese at Goshen, Laporte, Elkhart, Huntington, Clinton, Anderson. S Paul, Glenwood, Silverlake. Diphtheria: Present at Goshen, Colu bia City, Edinburg, Fortville, Marion, Farmland, Fort Branc Plainfield, Etna Green, and in Marion County. Syphilis reported cases, gonorrhea 26 cases. Rabies present in Knox and Hendric Counties.

Iowa.—Chancroid: Council Bluffs 2, Dubuque 1, Sioux City Diphtheria: Cedar Rapids 1, Clarinda 1, Council Bluffs 1, Des Moin 7, Dubuque 5, Gladbrook 1, Mason City 1, Radcliffe 1. Gonorrhe Ainsworth 1, Baxter 1, Boone 1, Castania 1, Council Bluffs 14, Dave port 15, Des Moines 3, Dubuque 1, Greene 1, Low Moor 1, Marshal town 3, Oskaloosa 1, Sioux City 10. Measles: Clarinda 1, Counc Bluffs 1. Scarlet fever: Beaman 1, Boone 1, Burlington 2, Ced Rapids 1, Council Bluffs 1, Davenport 1, Des Moines 9, Dubuque Goodell 2, Iowa City 3, Knoxville 1, Mason City 1, Ottumwa

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Bonaparte 1, Burlington 1, Cedar Rapids 5, nport 2, Des Moines 4, Farley 1, Mason City 2. venport 15, Dubuque 5, Marshalltown 1, Sioux icts of following counties. Diphtheria: Linn 1, er: Allamakee 1, Boone 1, Crawford 1, Grundy 2, Marshall 1, Shelby 2. Smallpox: Grundy 1. ed in State 258.

meningitis at Wayside. State totals: Smallpox rlet fever 49, influenza 2,153.

otals: Influenza 1,033, poliomyelitis 1, cerebro- nallpox 39, diphtheria 14, typhoid fever 3.

: Portland 1. Gonorrhea: Augusta 2, Port- kowhegan 2, Fairfield 1, Millbridge 1. Measles: nox 1. Scarlet fever: Portland 4, Bangor 4, Smallpox: Fort Kent 2. Syphilis: Bangor 5, Waterville 1, Machias 2, Calais 1, Baileyville 2, ases reported. Typhoid fever: Portland 1. hooping cough: Sanford 4. Influenza: Ninety-

usual prevalence. Scarlet fever: Cambridge 7, '. Diphtheria: Danvers 5, Haverhill 5, Somer- ugh: Belmont 10. Typhoid fever: Lawrence 5. ox (new foci): Beltrami County, Bemidji ounty, Rocksbury Township, 1; Rock County, o, 1; Waseca County, Kanesville Township, 1. 45, gonorrhea 75, chancroid 2.

totals: Influenza 1,476 cases, pneumonia 355 evalence of other diseases.

de of New York City. Typhoid fever 19, g cough 82, diphtheria 192 (decrease of 75 from arlet fever 213. Smallpox: Binghamton 1, a Falls 1, Mechanicsville 1. Cerebrospinal nonia 206. Voluntary reports: Syphilis 84,

tate totals: Whooping cough 58, measles 118, ever 9, septic sore throat 4, smallpox 41, chicken r 5, epidemic meningitis 2, ophthalmia neona- umonia 59, lobar pneumonia 41, gonorrhea 52, 5. Influenza by counties: Alamance 38, Cleve- 26, Davidson 25, Durham 1, Gaston 14, Mont- ransylvania 9, Tyrrell 12, city of Charlotte 32. revalence. Influenza negligible.

unties. Pittsburg: Influenza 20, pneumonia 7, re: Influenza 67, pneumonia 20 (7 deaths). 97, pneumonia 13 (3 deaths). Pushmataha: ia 3 (2 deaths). Cleveland: Influenza 44, pneu-

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monia 2. Haskell: Influenza 7, pneumonia 2. Washington: Infl
enza 34, pneumonia 6. Curtain: Smallpox 13. Latimer: Influen
27. Blaine: Influenza 20, diphtheria 1. Noble: Smallpox 3.

Vermont.—Thirty-two towns report 458 cases of influenza. N
other outbreak or unusual prevalence.

Virginia.—Smallpox: By counties; Loudoun 3, Tazewell 2, Norfo
1, Portsmouth 1. Influenza: Cases reported 231.

Washington.—No unusual outbreaks. Smallpox: Yakima 1
Seattle 9, Tacoma 11. Diphtheria: Kitsap County 9 cases.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cas
Fayetteville sanitary district, N. C.	1	Gulfport health district, Miss.	
Camp Gordon zone, Ga.	1	Camp Upton zone, N. Y.	

State Reports for December, 1918, and January, 1919.

Place.	New cases reported	Place.	New c report
Maryland (January):		Wisconsin (January):	
Anne Arundel County	7	Brown County	
Baltimore	14	Green Lake County	
		Milwaukee County	
Total	21	Waupaca County	
		Total	
South Dakota (December):			
Bon Homme County	1		
Charles Mix County	1		
Hutchinson County	1		
Stanley County	1		
Total	4		

City Reports for Week Ended Feb. 1, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Death
Akron, Ohio	1		Los Angeles, Cal.	2	
Alton, Ill.		2	Milwaukee, Wis.	3	
Baltimore, Md.	5	3	Nashville, Tenn.	1	
Birmingham, Ala.	3		Newark, N. J.	1	
Boston, Mass.		1	New York, N. Y.	5	
Bridgeport, Conn.	1	2	Passaic, N. J.	1	
Buffalo, N. Y.		1	Philadelphia, Pa.	1	
Charlotte, N. C.	1	1	Pittsfield, Mass.		
Chicago, Ill.	2		St. Louis, Mo.		
Cincinnati, Ohio		1	Springfield, Mo.		
Fort Scott, Kans.	1	1	Trenton, N. J.	1	
Little Rock, Ark.	1		Wheeling, W. Va.		
Long Beach, Cal.	1				

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cas
Camp Gordon zone, Ga.	1	Camp Polk zone, N. C.	
Camp Logan zone, Tex.	1	Camp Sheridan zone, Ala.	
Muscle Shoals sanitary district, Ala.	17	Tidewater health district, Va.	
Camp Pike zone, Ark.	1	Camp Travis zone, Tex.	

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DIPHTHERIA.

tra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cases.
.....	1	Camp Merritt zone, N. J.....	1
.....	4	Muscle Shoals sanitary district, Ala.....	5
.....	1	Camp Polk zone, N. C.....	1
nd Ala.....	1	Camp Sherman zone, Ohio.....	2
.....	3	Camp Zachary Taylor zone, Ky. and Ind.....	3
.....	7	Tidewater health district, Va.....	2
.....	1	Wilmington sanitary district, N. C.....	1
.....	1		

sles, scarlet fever, and tuberculosis, page 365.

GONORRHEA.

tra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cases.
.....	15	Fort Oglethorpe zone, Ga. and Tenn.....	11
.....	6	Picric Acid Plant zone, Ga.....	3
C.....	4	Camp Pike zone, Ark.....	22
.....	23	Camp Polk zone, N. C.....	2
.....	6	Portsmouth-Kittery sanitary district, N. H. and Me.....	1
.....	1	Camp Sheridan zone, Ala.....	8
.....	1	Camp Sherman zone, Ohio.....	4
.....	9	Camp Zachary Taylor zone, Ky. and Ind.....	30
.....	8	Tidewater health district, Va.....	6
.....	11	Camp Travis zone, Tex.....	17
.....	5	Camp Wadsworth zone, S. C.....	1
la.....	24		

INFLUENZA.

tra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cases.
.....	1	Camp Merritt zone, N. J.....	39
.....	20	Muscle Shoals sanitary district, Ala.....	32
.....	1	Fort Oglethorpe zone, Ga. and Tenn.....	17
.....	15	Picric Acid Plant zone, Ga.....	8
C.....	20	Camp Pike zone, Ark.....	53
.....	12	Camp Polk zone, N. C.....	144
and Ala.....	31	Portsmouth and Norfolk County health district, Va.....	28
.....	12	Camp Sevier zone, S. C.....	226
.....	66	Camp Sherman zone, Ohio.....	23
.....	91	Souther Field zone, Ga.....	100
.....	3	Camp Zachary Taylor zone, Ky. and Ind.....	90
.....	97	Tidewater health district, Va.....	10
.....	27	Camp Travis zone, Tex.....	9
.....	6	Camp Wadsworth zone, S. C.....	19
.....	89	Camp Wheeler zone, Ga.....	1
.....	8	Wilmington sanitary district, N. C.....	28
.....	2		

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MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		C
Gulfport health district, Miss	5	Camp Pike zone, Ark	

Maryland Report for January, 1919.

Place.	New cases reported.	Place.	New rep
Maryland:		Maryland—Continued.	
Kent County—		Somerset County—	
Chestertown	1	Fairmount	
		Rumbley	
		Total	

City Reports for Week Ended Feb. 1, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	De
Charleston, S. C		1	Pine Bluff, Ark	15	
Charlotte, N. C	1	1	Tuscaloosa, Ala	1	

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		C
Camp Bowie zone, Tex	2	Muscle Shoals sanitary district, Ala	
Camp Devens zone, Mass	4	Picric Acid Plant zone, Ga	
Fayetteville sanitary district, N. C	8	Camp Pike zone, Ark	
Gas and Flame School zone, Ga. and Ala	2	Camp Polk zone, N. C	
Camp Gordon zone, Ga	3	Camp Zachary Taylor zone, Ky. and Ind	
Gulfport health district, Miss	4	Tidewater health district, Va	
Camp Humphreys zone, Va	2	Camp Travis zone, Tex	
Camp Jackson zone, S. C	2	Camp Wadsworth zone, S. C	
Camp Lewis zone, Wash	3	Camp Wheeler zone, Ga	
Camp Logan zone, Tex	13		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 365.

PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		C
Camp Bowie zone, Tex	1	Gas and Flame School zone, Ga. and Ala	

Maryland Report for January, 1919.

During the month of January, 1919, one case of pellagra reported at Pinto, Allegany County, Md.

City Reports for Week Ended Feb. 1, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Dea
Birmingham, Ala	1	3	Roanoke, Va	1	
New Orleans, La	1		Tuscaloosa, Ala	1	
Oklahoma City, Okla		1			

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PNEUMONIA.

tra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.
	4
	1
	3
C.	5
and Ala.	3
	2
	2
	7
	7
	2
	2
	1

	Cases.
Camp Merritt zone, N. J.	9
Muscle Shoals sanitary district, Ala.	1
Picric Acid Plant zone, Ga.	2
Camp Pike zone, Ark.	5
Camp Polk zone, N. C.	1
Portsmouth and Norfolk County health district, Va.	2
Souther Field zone, Ga.	7
Tidewater health district, Va.	1
Camp Travis zone, Tex.	3
Wilmington sanitary district, N. C.	4

Reports for Week Ended Feb. 1, 1919.

re.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
	1			
	15			
	2			
	1	1		
			5	54
			1	1
	37	49		
	1			
	2	4	4	5
	1			
			2	2
	1	1		
	1			
	67	20		
	1			
	1			
	25	16		
	4			
	6	7		
	8			
	6	8		
	2	3		
			461	125
	48	63		
			4	2
	9			
	6	6		
	2	2		
	1	1		
	4	3		
	10	45	30	75
	2	3		
			6	6
	2			
	2	1		
			36	4
	4	2		
	14	16		
	1			
	1			
			42	2
	4			
	7	2		
	8	5		
	1			
	3	3		
	11	5		
	5			
	3	3		
			6	2
			7	
			7	4
			9	
	28	20		
	5	6		

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PNEUMONIA—Continued.

City Reports for Week Ended Feb. 1, 1919—Continued.

Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Death
Lackawanna, N. Y.	4	3		
Little Rock, Ark.	16	10		
Long Branch, N. J.			1	
Lorain, Ohio	1	1		
Los Angeles, Cal.	11	7		
Louisville, Ky.	3	7		
Lynn, Mass.	1	2		
Methuen, Mass.	3			
Montclair, N. J.	7	2		
Morgantown, W. Va.	1			
Morristown, N. J.			6	
Mount Vernon, N. Y.	4	7		
Nashville, Tenn.	1	3		
Newark, N. J.	58	14		
New Bedford, Mass.	1	3		
New Orleans, La.			5	
Newton, Mass.	2			
New York, N. Y.		366	981	
Norfolk, Va.	1	1		
North Tonawanda, N. Y.	2	2		
Norwich, Conn.	2	1		
Oak Park, Ill.	2	6		
Oklahoma City, Okla.			4	
Oswego, N. Y.	1			
Parkersburg, W. Va.	2	2		
Passaic, N. J.	6	3		
Peoria, Ill.			50	
Philadelphia, Pa.	247	110		
Piqua, Ohio	1	1		
Port Chester, N. Y.	7	3		
Portsmouth, Va.	4	5		
Richmond, Va.	2	6		
Rochester, N. Y.	12	3		
Rome, N. Y.	2			
Salem, Mass.	4	1		
Sandusky, Ohio			2	
Santa Barbara, Cal.			1	
Saratoga Springs, N. Y.	1	2		
Sault Ste. Marie, Mich.	1	1		
Schenectady, N. Y.	2			
Somerville, Mass.	3	3		
Springfield, Mass.	14	4		
Stockton, Cal.	1	5	8	
Topeka, Kans.	1	1		
Trenton, N. J.	2	8		
Troy, N. Y.	2	2		
Tyler, Tex.	38	3		
Wakefield, Mass.	3	1		
Watertown, Mass.	2	1		
West New York, N. J.			14	
Wichita, Kans.	4			
Winston-Salem, N. C.	5	2		
Worcester, Mass.	10			
Yonkers, N. Y.	8	12		

POLIOMYELITIS (INFANTILE PARALYSIS).

Wisconsin Report for January, 1919.

During the month of January, 1919, three cases of poliomyeli were reported in Wisconsin—one each in Milwaukee, Racine, a Shawano Counties.

City Reports for Week Ended Feb. 1, 1919.

During the week ended February 1, 1919, one case of poliomyeli was reported at Boston, Mass., and four cases were reported Chicago, Ill. One death was reported at El Paso, Tex.

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RABIES IN ANIMALS.

Reports for Week Ended Feb. 1, 1919.

was reported, during the week ended February Tex., two cases, and at Kansas City, Mo., one

SCARLET FEVER.

xtra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cases.
.....	1	Camp Lewis zone, Wash.....	1
.....	7	Camp Pike zone, Ark.....	4
.....	4	Camp Sheridan zone, Ala.....	2
and Ala.....	1	Camp Sherman zone, Ohio.....	4
.....	4	Camp Zachary Taylor zone, Ky. and Ind.....	9
.....	2	Tidewater health district, Va.....	2
.....	3	Wilmington sanitary district, N. C.....	1

easles, scarlet fever, and tuberculosis, page 365.

SMALLPOX.

xtra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cases.
.....	3	Muscle Shoals sanitary district, Ala.....	5
.....	4	Picric Acid Plant zone, Ga.....	1
and Ala.....	6	Portsmouth and Norfolk County health district, Va.....	2
.....	10		
.....	35	Camp Wadsworth zone, S. C.....	3
.....	2		

ts for January, 1919—Vaccination Histories.

	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
...	1	.....	.....	.....	1	.....
...	5	.....	.....	.....	5	.....
...	2	.....	.....	.....	2	.....
...	3	.....	.....	.....	3	.....
...	1	.....	.....	.....	1	.....
...	7	.....	.....	.....	7	.....
...	4	.....	.....	.....	4	.....
...	3	.....	.....	.....	3	.....
...	1	.....	.....	.....	1	.....
...	1	.....	.....	.....	1	.....
...	7	.....	.....	.....	7	.....
...	35	.....	.....	.....	35	.....

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SMALLPOX—Continued.

State Reports for January, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Wisconsin:						
Ashland County	4				1	3
Brown County	5				1	4
Chippewa County	2				2	
Clark County	10				10	
Columbia County	2				2	
Crawford County	7					7
Dane County	13		9		4	
Douglas County	15		1		14	
Eau Claire County	2				1	1
Florence County	10					10
Forest County	3				3	
Kewaunee County	3				3	
Manitowoc County	1		1			
Marathon County	1				1	
Marinette County	11				8	3
Milwaukee County	6				1	5
Oconto County	2					2
Outagamie County	5		4			1
Price County	2				2	
Rock County	2		2			
Rusk County	2		1			1
Sauk County	1					1
Sawyer County	1					1
Vilas County	10		1		9	
Washburn County	1					1
Washington County	1					1
Winnebago County	15				14	1
Total	137		19		76	42

State Reports for December, 1918, and January, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
South Dakota (December):			South Dakota—Continued.		
Codington County	3		Perkins County	9	
Custer County	3		Yankton County	1	
Davison County	1				
Fall River County	26		Total	53	
Grant County	2				
Gregory County	1		Vermont (January):		
Jerauld County	5		Orleans County	1	
Minnehaha County	2				

City Reports for Week Ended Feb. 1, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atchinson, Kans	5		Duluth, Minn	2	
Atlanta, Ga	23		East Cleveland, Ohio	1	
Beloit, Wis	2		Elgin, Ill	6	
Canton, Ill	1		El Paso, Tex	1	
Chanute, Kans	1		Greeley, Colo	1	
Cheyenne, Wyo	3		Green Bay, Wis	3	
Chicago, Ill	1		Hoquiam, Wash	1	
Cleveland, Ohio	7		Houston, Tex	1	1
Council Bluffs, Iowa	17		Indianapolis, Ind	1	
Covington, Ky	2		Ironwood, Mich	1	
Davenport, Iowa	4		Kalamazoo, Mich	5	
Denver, Colo	10		Kansas City, Mo	6	
Des Moines, Iowa	1		Lincoln, Nebr	10	

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SMALLPOX—Continued.

ts for Week Ended Feb. 1, 1919—Continued.

Cases.	Deaths.	Place.	Cases.	Deaths.
1	.....	St. Joseph, Mo.	3	.....
2	.....	St. Paul, Minn.	8	.....
2	.....	Salt Lake City, Utah	1	.....
1	.....	San Bernardino, Cal.	1	.....
5	.....	San Jose, Cal.	1	.....
2	.....	Seattle, Wash.	6	.....
4	.....	Sioux City, Iowa.	3	.....
3	.....	Sioux Falls, S. Dak.	1	.....
2	.....	South Bend, Ind.	1	.....
5	.....	Spartanburg, S. C.	1	.....
20	.....	Springfield, Ill.	5	.....
21	.....	Superior, Wis.	4	.....
2	.....	Tacoma, Wash.	3	.....
5	.....	Toledo, Ohio.	1	.....
6	.....	Wilkinsburg, Pa.	1	.....
2	.....	Winston-Salem, N. C.	12	.....
2	.....	Zanesville, Ohio.	4	.....
1	.....			

SYPHILIS.

Extra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cases.
.....	7	Picric Acid Plant zone, Ga.	2
.....	2	Camp Pike zone, Ark.	5
N. C.	1	Portsmouth and Norfolk County health district, Va.	1
.....	39	Camp Sheridan zone, Ala.	16
.....	1	Camp Zachary Taylor zone, Ky. and Ind.	43
.....	12	Tidewater health district, Va.	3
.....	9	Camp Travis zone, Tex.	8
.....	3		
Ala.	6		

TETANUS.

Reports for Week Ended Feb. 1, 1919.

ended February 1, 1919, one case of tetanus was nd, Ohio. One death from this disease was ma City, Okla., one at St. Joseph, Mo., and one at

TUBERCULOSIS.

Extra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.		Cases.
.....	1	Picric Acid Plant zone, Ga.	1
N. C.	1	Camp Pike zone, Ark.	4
. and Ala.	2	Camp Polk zone, N. C.	1
.....	10	Camp Zachary Taylor zone, Ky. and Ind.	10
.....	1	Tidewater health district, Va.	1
.....	1	Camp Travis zone, Tex.	3
.....	4	Wilmington sanitary district, N. C.	2
.....	2		

easles, scarlet fever, and tuberculosis, page 365.

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TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 15, 1919.

	Cases.
Camp Bowie zone, Tex	1
Camp Hancock zone, Ga	1
Camp Jackson zone, S. C	1
Fort Leavenworth zone, Kans	2
Camp Logan zone, Tex	1
Camp Merritt zone, N. J	
Portsmouth and Norfolk County health district, Va	
Wilmington sanitary district, N. C	

State Reports for December, 1918, and January, 1919.

Place.	New cases reported.
Maryland (January):	
Baltimore	18
Allegany County—	
Cumberland	1
Allegany hospital	2
Anne Arundel County—	
Brooklyn	2
Gambrills	1
Baltimore County—	
Rossville	4
Stevenson	1
Catonsville	1
Essex	1
Caroline County—	
Denton, R. D	2
Federalsburg	3
Ridgely, R. D	1
Carroll County—	
Taneytown, R. D	2
Charles County—	
Pomfret	1
Indian Head	1
Dorchester County—	
Hurlock	1
Frederick County—	
Frederick, R. D	2
Walkersville, R. D	2
Loys	1
Harford County—	
Havre de Grace	1
Maryland (January)—Continued.	
Montgomery County—	
New Cut Road	
Washington County—	
Boonsboro, R. D	
Total	
South Dakota (December):	
Clark County	
Fall River County	
Total	
Vermont (January):	
Caledonia County	
Chittenden County	
Total	
Wisconsin (January):	
Burnett County	
Dodge County	
La Crosse County	
Milwaukee County	
Total	

City Reports for Week Ended Feb. 1, 1919.

Place.	Cases.	Deaths.
Albany, N. Y	1	
Allentown, Pa	3	
Baltimore, Md	9	1
Berkeley, Cal	1	
Birmingham, Ala		1
Boston, Mass	3	
Buffalo, N. Y	1	
Butler, Pa	17	
Cambridge, Mass		1
Chicago, Ill	1	1
Columbus, Ohio	1	
Covington, Ky	1	1
Detroit, Mich	1	
Duluth, Minn	1	
East Orange, N. J	1	
Elizabeth, N. J	1	
Everett, Mass	1	
Fairmont, W. Va	4	
Fall River, Mass	1	
Greensboro, N. C		1
Houston, Tex	1	2
Independence, Mo	10	
Ironton, Ohio	2	1
La Crosse, Wis	1	
Lawrence, Mass	3	1
Long Beach, Cal	1	
Los Angeles, Cal	4	
Lynn, Mass	1	
Memphis, Tenn	1	
Milwaukee, Wis	1	
Minneapolis, Minn	2	
Mobile, Ala		
Moline, Ill		
Nashville, Tenn	1	
New Haven, Conn	1	
New Orleans, La	3	
Newton, Mass	2	
New York, N. Y	9	
Oswego, N. Y	2	
Philadelphia, Pa	4	
Pine Bluff, Ark	2	
Providence, R. I	1	
Quincy, Mass	1	
Rahway, N. J	1	
Reading, Pa	1	
Saginaw, Mich	2	
St. Louis, Mo	1	
San Bernardino, Cal	1	
Waltham, Mass	1	
Zanesville, Ohio	3	

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EASLES, SCARLET FEVER, AND TUBERCULOSIS.

orts for December, 1918, and January, 1919.

State.	Cases reported.		
	Diphtheria.	Measles	Scarlet fever.
	200	247	265
	22	20	34
	24	92	34
	139	168	243

Reports for Week Ended Feb. 1, 1919.

	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
...	14,406	2	.....	.....	.....	.....	.....	.....	.....	1
...	93,604	56	3	.....	4	.....	7	.....	1	.....
...	28,433	8	2	.....	.....	.....	.....	.....	1	.....
...	106,632	.....	4	.....	3	.....	3	.....	3	.....
...	16,232	13	.....	.....	.....	.....	.....	.....	1	.....
...	65,109	.....	5	.....	3	.....	1	.....	2	.....
..	19,581	13	.....	.....	.....	.....	.....	.....	.....	.....
..	23,783	15	.....	.....	.....	.....	.....	.....	.....	.....
..	59,712	.....	15	.....	.....	.....	5	.....	.....	.....
..	15,041	10	.....	.....	1	.....	3	.....	1	.....
..	16,954	5	.....	.....	.....	.....	.....	.....	.....	.....
..	18,005	5	.....	.....	.....	.....	.....	.....	.....	.....
..	13,073	7	2	.....	1	.....	.....	.....	.....	.....
..	14,629	3	.....	.....	1	.....	.....	.....	.....	.....
..	22,008	5	.....	.....	.....	.....	.....	.....	.....	.....
..	16,785	.....	.....	.....	.....	.....	2	.....	.....	.....
..	196,144	106	4	1	2	.....	4	.....	3	3
..	59,515	7	.....	.....	.....	.....	1	.....	3	.....
..	19,776	4	1	.....	2	.....	.....	.....	.....	.....
..	35,612	10	3	.....	.....	.....	1	.....	4	4
..	594,637	362	38	.....	17	.....	60	.....	30	30
..	17,544	12	.....	.....	.....	.....	.....	.....	.....	1
..	30,159	.....	3	.....	2	.....	2	.....	.....	.....
..	72,201	.....	10	.....	.....	.....	1	.....	6	.....
..	10,437	5	.....	.....	.....	.....	.....	.....	.....	.....
..	10,613	12	.....	.....	.....	.....	1	.....	.....	2
..	11,575	8	.....	.....	.....	.....	1	.....	.....	1
..	18,547	5	1	.....	1	.....	.....	.....	.....	.....
..	11,099	3	.....	.....	.....	.....	.....	.....	.....	.....
..	60,427	14	.....	.....	.....	.....	.....	.....	.....	.....
..	13,892	3	.....	.....	.....	.....	.....	.....	.....	1
..	22,128	12	.....	.....	.....	.....	.....	.....	.....	1
..	15,123	.....	.....	.....	.....	.....	2	.....	.....	.....
..	189,716	71	3	.....	11	.....	5	.....	16	6
..	19,013	3	1	.....	.....	.....	1	1	.....	.....
..	11,661	4	.....	.....	.....	.....	.....	.....	.....	.....
..	16,123	.....	.....	.....	.....	.....	1	.....	.....	.....
..	35,951	9	.....	.....	.....	.....	.....	.....	.....	.....
..	767,813	291	53	.....	8	.....	44	.....	54	18
..	12,012	.....	.....	.....	.....	.....	2	.....	.....	.....
..	22,060	.....	1	.....	.....	.....	.....	.....	2	.....
..	14,544	.....	.....	.....	1	.....	.....	.....	.....	.....
..	10,472	6	.....	.....	.....	.....	.....	.....	.....	.....
..	124,721	48	10	.....	.....	.....	2	.....	3	4
..	16,318	7	1	.....	.....	.....	3	.....	.....	1
..	69,152	16	.....	.....	.....	.....	3	.....	2	1
..	33,526	10	2	.....	.....	.....	.....	.....	1	.....
..	475,781	200	81	5	19	3	28	1	38	12
..	25,144	3	.....	.....	.....	.....	2	.....	.....	.....
..	21,802	3	.....	.....	4	.....	.....	.....	.....	1
..	44,057	.....	1	.....	.....	.....	1	.....	.....	.....
..	10,158	4	1	1	.....	.....	2	.....	.....	.....
..	15,995	5	.....	.....	.....	.....	.....	.....	.....	.....
..	114,223	49	8	.....	.....	.....	2	.....	3	7
..	108,117	.....	3	.....	.....	.....	7	.....	4	.....
..	10,795	.....	1	.....	.....	.....	.....	.....	.....	.....

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Feb. 1, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Chambersburg, Pa.	12,475	.....	.....	.....	.....	.....	1	.....	.....	.....
Champaign, Ill.	15,052	5	.....	.....	.....	.....	.....	.....	.....	.....
Chanute, Kans.	12,968	5	.....	.....	.....	.....	.....	.....	.....	.....
Charleston, S. C.	61,041	29	.....	.....	.....	.....	.....	.....	1	1
Charleston, W. Va.	31,060	20	4	.....	.....	.....	1	.....	.....	.....
Charlotte, N. C.	40,759	29	.....	.....	5	.....	1	.....	.....	1
Chelsea, Mass.	48,405	23	.....	.....	2	.....	.....	.....	.....	2
Cheyenne, Wyo.	11,320	.....	.....	.....	1	.....	.....	.....	.....	.....
Chicago, Ill.	2,547,201	823	127	12	89	.....	59	2	332	62
Chicopee, Mass.	29,950	6	2	.....	.....	.....	.....	.....	.....	.....
Chillicothe, Ohio.	15,625	2	.....	.....	.....	.....	3	.....	.....	.....
Cincinnati, Ohio.	414,248	138	11	.....	1	.....	11	.....	28	17
Cleveland, Ohio.	692,259	268	29	3	8	.....	11	.....	30	19
Clinton, Mass.	[1] 13,075	2	.....	.....	.....	.....	1	.....	.....	.....
Coatesville, Pa.	14,998	.....	1	.....	.....	.....	.....	.....	.....	.....
Cohoes, N. Y.	25,292	8	.....	.....	.....	.....	2	.....	1	.....
Colorado Springs, Colo.	38,965	13	.....	.....	.....	.....	.....	.....	22	4
Columbia, S. C.	35,165	.....	.....	.....	1	.....	.....	.....	1	.....
Columbus, Ohio.	220,135	65	1	.....	.....	.....	3	.....	4	6
Concord, N. H.	22,858	9	.....	.....	.....	.....	1	.....	.....	.....
Council Bluffs, Iowa.	31,838	14	.....	.....	4	.....	2	.....	.....	2
Covington, Ky.	59,623	23	5	.....	.....	.....	1	.....	1	1
Cranston, R. I.	26,773	6	.....	.....	.....	.....	.....	.....	.....	.....
Cumberland, Md.	26,686	9	.....	.....	8	.....	.....	.....	.....	.....
Danbury, Conn.	22,931	11	.....	.....	.....	.....	.....	.....	1	.....
Danvers, Mass.	10,037	.....	.....	.....	.....	.....	.....	.....	.....	1
Danville, Ill.	32,969	7	1	.....	.....	.....	.....	.....	.....	.....
Danville, Va.	20,183	10	.....	.....	.....	.....	.....	.....	.....	.....
Davenport, Iowa.	49,618	.....	1	.....	.....	.....	.....	.....	.....	.....
Dayton, Ohio.	128,939	48	2	1	1	.....	4	.....	3	.....
Denver, Colo.	268,439	83	7	.....	.....	.....	6	.....	.....	12
Des Moines, Iowa.	104,052	.....	5	.....	.....	.....	4	.....	.....	.....
Detroit, Mich.	619,648	335	90	11	8	2	62	.....	32	22
Dover, N. H.	13,276	7	.....	.....	.....	.....	.....	.....	1	.....
Dubuque, Iowa.	40,096	.....	3	.....	1	.....	1	.....	.....	.....
Duluth, Minn.	97,077	22	6	.....	1	.....	.....	.....	5	1
Dunmore, Pa.	21,286	.....	3	.....	.....	.....	1	.....	.....	.....
Durham, N. C.	26,160	13	.....	.....	.....	.....	1	.....	.....	1
East Chicago, Ind.	30,286	3	.....	.....	.....	.....	.....	.....	.....	.....
East Cleveland, Ohio.	13,864	.....	.....	.....	.....	.....	1	.....	.....	.....
Easthampton, Mass.	10,656	.....	.....	.....	.....	.....	1	.....	.....	.....
East Liverpool, Ohio.	22,941	12	.....	.....	.....	.....	.....	.....	.....	1
Easton, Pa.	30,854	.....	4	.....	6	.....	.....	.....	.....	.....
East Orange, N. J.	43,791	19	1	.....	1	.....	.....	.....	1	1
East Providence, R. I.	18,485	.....	.....	.....	.....	.....	2	.....	.....	.....
Eau Claire, Wis.	18,887	.....	1	.....	12	.....	.....	.....	.....	.....
Elgin, Ill.	28,562	4	.....	.....	.....	.....	.....	.....	.....	.....
Elizabeth, N. J.	88,830	.....	7	2	.....	.....	1	.....	9	5
Elmira, N. Y.	38,272	16	.....	.....	2	.....	6	.....	1	1
El Paso, Tex.	69,149	54	5	.....	.....	.....	3	.....	.....	11
Englewood, N. J.	12,003	1	.....	.....	.....	.....	.....	.....	.....	.....
Erie, Pa.	76,592	.....	6	.....	.....	.....	1	.....	5	.....
Eureka, Cal.	15,142	3	.....	.....	.....	.....	.....	.....	.....	.....
Evanston, Ill.	29,304	12	1	.....	1	.....	.....	.....	.....	.....
Everett, Mass.	40,160	14	5	.....	.....	.....	9	.....	2	.....
Everett, Wash.	37,205	.....	.....	.....	.....	.....	2	.....	.....	.....
Fairmont, W. Va.	16,111	.....	.....	.....	.....	.....	2	.....	.....	.....
Fall River, Mass.	129,828	54	6	.....	25	1	4	.....	6	6
Fargo, N. Dak.	17,872	6	.....	.....	.....	.....	.....	.....	.....	.....
Findlay, Ohio.	[1] 14,558	4	1	.....	.....	.....	.....	.....	.....	.....
Flint, Mich.	57,386	13	7	1	.....	.....	1	.....	.....	.....
Fond du Lac, Wis.	21,486	9	.....	.....	.....	.....	.....	.....	.....	1
Fort Scott, Kans.	10,564	1	.....	.....	.....	.....	.....	.....	2	.....
Fort Wayne, Ind.	78,014	30	1	.....	.....	.....	.....	.....	.....	3
Fort Worth, Tex.	109,597	47	.....	.....	.....	.....	.....	.....	3	3
Framingham, Mass.	14,149	3	.....	.....	.....	.....	.....	.....	1	1
Frederick, Md.	11,225	5	.....	.....	.....	.....	1	.....	.....	.....
Freeport, Ill.	19,844	5	1	.....	.....	.....	.....	.....	.....	1
Fremont, Ohio.	11,034	4	.....	.....	.....	.....	.....	.....	.....	.....
Fresno, Cal.	35,314	10	.....	.....	.....	.....	.....	.....	.....	1
Galesburg, Ill.	24,629	12	.....	.....	6	.....	.....	.....	.....	.....
Galveston, Tex.	42,650	16	.....	.....	.....	.....	.....	.....	.....	2

[1] Population Apr. 15, 1910.

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ES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

for Week Ended Feb. 1, 1919—Continued.

Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
13,915	2	.....	.....	.....	.....	1	.....	.....	.....
16,342	11	.....	.....	.....	.....	2	.....	.....	.....
132,861	43	3	.....	1	.....	9	1	8	1
[1] 13,948	9	1	.....	2	.....	2	.....	.....	.....
11,942	.....	1	.....	.....	.....	2	.....	.....	.....
30,017	15	1	.....	.....	.....	.....	.....	.....	.....
15,881	.....	1	.....	.....	.....	.....	.....	.....	.....
19,594	.....	.....	.....	.....	.....	2	.....	.....	1
17,412	12	1	.....	.....	.....	2	.....	.....	.....
73,276	.....	2	.....	.....	.....	2	.....	.....	.....
112,831	.....	7	2	32	1	7	1	6	2
28,981	.....	.....	.....	.....	.....	1	.....	.....	.....
33,859	15	3	.....	.....	.....	.....	.....	5	.....
78,324	16	9	.....	.....	.....	.....	.....	4	1
12,459	2	.....	.....	.....	.....	.....	.....	.....	.....
66,503	15	7	3	.....	.....	3	.....	1	2
116,878	57	.....	.....	7	.....	.....	.....	.....	4
12,898	4	.....	.....	.....	.....	.....	.....	.....	.....
21,461	.....	1	.....	1	.....	1	.....	.....	.....
11,964	13	.....	.....	.....	.....	1	.....	.....	.....
283,622	87	9	2	2	.....	4	.....	9	7
14,079	4	.....	.....	.....	.....	2	.....	1	.....
15,095	9	.....	.....	.....	.....	1	.....	.....	.....
16,017	.....	.....	.....	.....	.....	13	.....	1	.....
37,431	.....	3	.....	.....	.....	.....	.....	1	.....
14,411	2	.....	.....	.....	.....	.....	.....	.....	.....
312,557	.....	32	.....	.....	.....	7	.....	18	.....
10,678	2	.....	.....	.....	.....	.....	.....	.....	.....
70,473	.....	11	.....	.....	.....	.....	.....	.....	.....
50,408	29	2	.....	.....	.....	1	.....	2	3
102,096	.....	2	.....	.....	.....	.....	.....	5	.....
305,816	140	6	2	5	.....	3	1	1	10
24,325	9	.....	.....	.....	.....	1	.....	2	.....
10,725	3	.....	.....	.....	.....	.....	.....	.....	.....
32,833	5	1	.....	3	.....	1	.....	.....	.....
59,112	.....	2	.....	15	.....	2	.....	6	6
21,929	8	.....	.....	.....	.....	1	.....	.....	.....
16,219	15	.....	.....	7	.....	.....	.....	1	.....
31,835	9	1	.....	.....	.....	1	.....	.....	.....
21,481	13	.....	.....	.....	.....	.....	.....	.....	.....
16,086	14	.....	.....	8	.....	.....	.....	.....	2
51,437	.....	6	.....	87	.....	.....	.....	.....	.....
13,477	5	1	.....	2	.....	.....	.....	1	.....
102,923	30	4	1	.....	.....	2	.....	9	3
[1] 19,363	7	3	.....	.....	.....	1	.....	.....	1
20,947	.....	.....	.....	2	.....	1	.....	.....	.....
37,145	13	4	.....	.....	.....	8	.....	.....	1
46,957	11	4	.....	1	.....	3	.....	.....	2
58,716	27	1	.....	5	.....	7	.....	9	3
20,028	1	.....	.....	3	.....	.....	.....	.....	.....
21,338	5	.....	.....	.....	.....	1	.....	.....	1
29,163	21	1	.....	.....	.....	.....	.....	.....	.....
15,733	4	.....	.....	.....	.....	.....	.....	1	.....
38,266	10	.....	.....	2	.....	3	.....	.....	.....
535,485	241	22	1	14	.....	8	1	43	.....
240,808	82	3	.....	8	.....	5	.....	13	11
114,366	46	3	1	7	.....	6	.....	5	2
33,497	25	.....	.....	.....	.....	.....	.....	.....	1
104,534	23	4	.....	1	.....	8	.....	4	3
31,315	12	.....	.....	1	.....	1	.....	.....	3
15,859	2	.....	.....	1	.....	1	.....	.....	.....
79,607	39	1	.....	.....	.....	3	.....	.....	1
13,931	1	2	.....	3	.....	.....	.....	.....	.....
[1] 14,610	8	1	.....	2	.....	.....	.....	.....	1
19,923	4	1	.....	1	.....	5	.....	.....	.....
10,135	1	2	.....	.....	.....	2	.....	1	.....
14,938	5	.....	.....	.....	.....	.....	.....	.....	2
26,681	9	1	.....	1	.....	1	.....	1	.....
17,724	7	.....	.....	.....	.....	.....	.....	.....	.....
151,877	77	3	.....	9	.....	1	.....	15	10
29,431	.....	.....	.....	.....	.....	4	.....	.....	2
14,320	7	.....	.....	.....	.....	1	.....	1	.....

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Feb. 1, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Middletown, N. Y.	15,890	.....	.....	.....	.....	.....	1	.....	.....	.....
Middletown, Ohio.	16,384	7	1	.....	4	.....	.....	.....	.....	.....
Milwaukee, Wis.	445,008	84	7	.....	.....	.....	19	.....	.....	3
Minneapolis, Minn.	373,448	.....	18	1	1	.....	14	1	20	5
Mishawaka, Ind.	17,083	3	.....	.....	.....	.....	.....	.....	.....	.....
Missoula, Mont.	19,075	3	.....	.....	.....	.....	2	.....	.....	.....
Mobile, Ala.	59,201	44	.....	.....	11	.....	.....	.....	.....	2
Moline, Ill.	27,976	3	.....	.....	.....	.....	.....	.....	.....	1
Monessen, Pa.	23,070	.....	1	.....	.....	.....	.....	.....	.....	.....
Montclair, N. J.	27,087	3	.....	.....	.....	.....	1	.....	.....	1
Montgomery, Ala.	44,039	11	.....	.....	1	.....	.....	.....	.....	.....
Morgantown, W. Va.	14,444	3	.....	.....	.....	.....	1	.....	.....	.....
Morristown, N. J.	13,410	7	1	.....	.....	.....	.....	.....	.....	1
Moundsville, W. Va.	11,513	7	.....	.....	.....	.....	.....	.....	.....	1
Mount Carmel, Pa.	20,709	.....	.....	.....	.....	.....	.....	.....	3	.....
Mount Vernon, N. Y.	37,991	18	.....	.....	.....	.....	.....	.....	.....	.....
Muskogee, Okla.	47,173	.....	2	.....	.....	.....	1	.....	.....	.....
Nanticoke, Pa.	23,811	.....	.....	.....	8	.....	.....	.....	.....	.....
Nashua, N. H.	27,541	7	.....	.....	.....	.....	4	.....	.....	.....
Nashville, Tenn.	118,136	62	.....	.....	.....	.....	7	.....	1	4
Newark, N. J.	418,789	151	55	3	2	.....	15	.....	45	20
New Bedford, Mass.	121,622	35	3	1	.....	.....	.....	.....	14	5
New Britain, Conn.	55,385	.....	2	.....	6	.....	8	.....	4	.....
Newburyport, Mass.	15,291	2	.....	.....	.....	.....	.....	.....	.....	.....
New Haven, Conn.	152,275	50	16	.....	10	.....	5	.....	17	3
New London, Conn.	21,199	15	.....	1	.....	.....	.....	.....	.....	.....
New Orleans, La.	377,010	243	12	.....	.....	.....	2	.....	27	19
Newport, Ky.	32,133	5	2	.....	.....	.....	2	.....	.....	.....
Newport, R. I.	30,585	11	4	1	.....	.....	.....	.....	.....	2
Newton, Mass.	44,345	20	1	.....	.....	.....	1	.....	1	1
New York, N. Y.	5,737,492	2,448	316	33	50	2	128	6	281	184
Niagara Falls, N. Y.	38,466	16	5	.....	.....	.....	1	.....	3	1
Norfolk, Va.	91,148	.....	.....	.....	2	.....	3	.....	.....	.....
Norristown, Pa.	31,969	.....	.....	.....	1	.....	.....	.....	.....	.....
North Adams, Mass.	[1] 22,019	7	.....	.....	.....	.....	.....	.....	4	1
Northampton, Mass.	20,006	10	.....	.....	.....	.....	3	.....	.....	1
North Attleboro, Mass.	11,248	4	1	.....	.....	.....	.....	.....	.....	.....
North Braddock, Pa.	15,684	.....	1	.....	1	.....	.....	.....	.....	.....
North Tonawanda, N. Y.	14,060	7	.....	.....	.....	.....	.....	.....	3	1
North Yakima, Wash.	22,058	.....	2	.....	.....	.....	8	.....	.....	.....
Norwich, Conn.	21,923	1	2	.....	.....	.....	.....	.....	.....	.....
Oakland, Cal.	206,405	83	3	.....	1	.....	5	.....	12	6
Oak Park, Ill.	27,816	12	.....	.....	3	.....	.....	.....	.....	.....
Ogdensburg, N. Y.	16,845	5	.....	.....	.....	.....	.....	.....	.....	.....
Ogden, Utah.	32,343	11	.....	.....	.....	.....	1	.....	.....	.....
Oklahoma City, Okla.	97,588	22	2	.....	4	.....	1	.....	1	.....
Olean, N. Y.	16,927	7	.....	1	.....	.....	.....	.....	.....	.....
Omaha, Nebr.	177,777	44	5	1	7	.....	3	1	.....	3
Orange, Conn.	14,393	5	.....	.....	.....	.....	.....	.....	.....	2
Orange, N. J.	33,636	18	4	.....	.....	.....	.....	.....	1	.....
Oswego, N. Y.	24,219	.....	.....	.....	1	.....	2	.....	.....	.....
Parkersburg, W. Va.	21,059	6	.....	.....	.....	.....	.....	.....	.....	.....
Passaic, N. J.	74,478	17	2	.....	.....	.....	.....	.....	.....	2
Peekskill, N. Y.	19,034	3	.....	.....	.....	.....	.....	.....	.....	1
Peoria, Ill.	72,184	20	.....	.....	.....	.....	1	.....	.....	2
Perth Amboy, N. J.	42,646	18	.....	.....	.....	.....	1	.....	2	1
Philadelphia, Pa.	1,735,514	784	68	10	14	.....	55	3	113	76
Phoenixville, Pa.	11,871	.....	.....	.....	1	.....	.....	.....	.....	.....
Pine Bluff, Ark.	17,777	.....	3	.....	.....	.....	.....	.....	6	.....
Piqua, Ohio.	14,275	6	.....	.....	.....	.....	.....	.....	.....	1
Pittsburgh, Pa.	586,196	.....	10	.....	3	.....	10	.....	14	.....
Pittsfield, Mass.	39,678	12	.....	.....	.....	.....	.....	.....	.....	.....
Pittston, Pa.	18,975	.....	1	.....	.....	.....	.....	.....	.....	.....
Plainfield, N. J.	24,330	11	4	.....	.....	.....	.....	.....	1	1
Plattsburg, N. Y.	13,111	5	8	.....	.....	.....	.....	.....	1	.....
Plymouth, Mass.	14,001	5	.....	.....	.....	.....	.....	.....	.....	1
Plymouth, Pa.	19,439	.....	.....	.....	4	.....	.....	.....	1	.....
Pontiac, Mich.	18,006	9	5	1	.....	.....	1	.....	.....	.....
Port Chester, N. Y.	16,727	4	.....	.....	.....	.....	.....	.....	.....	.....
Portland, Me.	64,720	27	.....	.....	.....	.....	3	.....	.....	2
Portland, Oreg.	308,399	111	11	2	4	.....	2	.....	7	3
Portsmouth, Va.	40,693	.....	1	.....	2	.....	.....	.....	3	.....

[1] Population Apr. 15, 1910.

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ES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

s for Week Ended Feb. 1, 1919—Continued.

Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
22,717	.....	8	.....	21	.....	.....	.....	3	.....
30,786	12	3	.....	.....	.....	.....	.....	2	1
259,895	105	30	5	.....	.....	6	.....	.....	.....
39,022	14	1	.....	.....	.....	2	.....	1	.....
10,361	1	.....	.....	.....	.....	.....	.....	.....	.....
20,274	10	.....	.....	2	.....	.....	.....	.....	.....
111,607	.....	2	.....	86	.....	1	.....	.....	.....
14,573	2	.....	.....	.....	.....	3	.....	.....	.....
15,514	3	.....	.....	.....	.....	.....	.....	.....	.....
158,702	59	2	.....	.....	.....	3	.....	22	5
264,714	80	6	1	5	.....	10	.....	8	6
56,739	11	.....	.....	.....	.....	3	.....	.....	.....
29,452	12	1	.....	.....	.....	.....	.....	.....	.....
12,673	8	.....	.....	.....	.....	1	.....	.....	1
24,259	.....	3	.....	.....	.....	1	.....	4	.....
15,038	8	.....	.....	.....	.....	.....	.....	.....	.....
68,984	26	1	.....	.....	.....	1	.....	4	2
56,469	17	3	.....	.....	.....	.....	.....	.....	1
86,498	51	13	3	.....	.....	3	.....	3	2
768,630	234	35	2	5	.....	12	1	35	16
252,465	65	30	2	9	1	20	.....	10	7
49,346	10	5	.....	.....	.....	2	.....	1	2
121,623	51	2	.....	1	.....	3	.....	.....	1
17,616	12	.....	.....	1	.....	.....	.....	.....	1
56,412	21	1	.....	.....	.....	.....	.....	4	3
20,226	9	1	.....	.....	.....	.....	.....	.....	.....
11,217	5	.....	.....	.....	.....	.....	.....	.....	.....
39,810	.....	.....	.....	.....	.....	2	.....	.....	.....
15,360	3	.....	.....	.....	.....	.....	.....	1	1
15,150	4	.....	.....	.....	.....	.....	.....	.....	.....
13,839	9	.....	.....	.....	.....	.....	.....	1	.....
10,210	6	.....	.....	.....	.....	.....	.....	.....	.....
14,130	4	.....	.....	1	.....	1	.....	.....	.....
103,774	20	5	1	.....	.....	.....	.....	1	2
149,541	.....	10	.....	.....	.....	5	.....	8	.....
366,445	.....	8	.....	6	.....	19	.....	.....	.....
21,274	.....	5	.....	1	.....	.....	.....	.....	.....
19,156	.....	.....	.....	1	.....	.....	.....	.....	.....
29,753	.....	1	.....	5	.....	.....	.....	.....	.....
16,887	3	.....	.....	.....	.....	.....	.....	.....	.....
88,618	22	10	.....	1	.....	2	.....	5	1
70,967	23	1	1	22	.....	3	.....	.....	1
14,465	1	.....	.....	.....	.....	2	.....	.....	.....
21,985	4	1	.....	9	.....	.....	.....	.....	.....
62,623	21	2	.....	1	.....	.....	.....	.....	4
108,668	49	2	.....	.....	.....	4	.....	6	2
41,169	13	.....	.....	.....	.....	.....	.....	.....	2
52,296	19	.....	.....	23	.....	.....	.....	1	1
15,759	.....	1	.....	.....	.....	.....	.....	3	.....
28,259	11	1	.....	.....	.....	.....	.....	2	.....
36,209	25	.....	.....	.....	.....	.....	.....	.....	1
47,167	17	.....	.....	1	.....	3	.....	.....	1
158,559	59	9	1	2	.....	12	.....	3	5
117,446	.....	3	.....	1	.....	9	.....	.....	.....
36,610	27	.....	.....	9	.....	1	.....	6	3
67,361	25	.....	.....	.....	.....	.....	.....	.....	2
202,010	77	7	1	.....	.....	17	.....	12	9
49,538	25	.....	.....	.....	.....	.....	.....	.....	.....
113,974	65	4	.....	.....	.....	.....	.....	3	4
78,094	34	5	.....	.....	.....	5	1	3	3
10,824	6	2	.....	.....	.....	.....	.....	2	.....
13,803	3	1	1	.....	.....	.....	.....	.....	.....
12,947	2	1	.....	.....	.....	.....	.....	.....	1
26,067	.....	3	.....	.....	.....	1	.....	.....	.....
31,011	10	.....	.....	.....	.....	.....	.....	.....	.....
22,076	.....	.....	.....	.....	.....	1	.....	2	.....
89,201	2	2	.....	2	.....	.....	.....	1	2
15,188	10	.....	.....	.....	.....	1	.....	1	1
30,404	5	.....	.....	.....	.....	.....	.....	.....	1
15,622	5	.....	.....	.....	.....	.....	.....	.....	.....
19,666	14	.....	.....	.....	.....	.....	.....	1	.....
13,403	.....	.....	.....	1	.....	5	.....	.....	.....
18,769	9	1	1	.....	.....	1	.....	.....	1
44,386	8	1	.....	.....	.....	1	.....	2	.....

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Con

City Reports for Week Ended Feb. 1, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tube culosi
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.
West New York, N. J.	19,613	8	6	.....	.....	.....	1	.....	1
West Orange, N. J.	13,964	2	1	.....	.....	.....	.....	.....	.....
Wheeling, W. Va.	43,657	26	.....	.....	.....	.....	.....	.....	1
Wichita, Kans.	73,597	23	.....	.....	.....	.....	1	.....	6
Wilkes-Barre, Pa.	78,334	.....	4	.....	.....	.....	1	.....	1
Wilkinsburg, Pa.	23,899	.....	.....	.....	.....	.....	1	.....	1
Williamsport, Pa.	34,123	.....	.....	.....	.....	.....	2	.....	.....
Wilmington, Del.	95,369	61	2	1	3	.....	1	.....	3
Wilmington, N. C.	30,400	20	.....	.....	.....	.....	.....	.....	.....
Winchester, Mass.	10,812	2	.....	.....	.....	.....	.....	.....	.....
Winona, Minn.	[1] 18,583	7	.....	.....	.....	.....	.....	.....	.....
Winston-Salem, N. C.	33,136	13	.....	.....	1	.....	1	.....	.....
Winthrop, Mass.	13,105	.....	.....	.....	.....	.....	3	.....	.....
Woburn, Mass.	16,076	2	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass.	166,106	55	6	.....	13	.....	1	1	2
Yonkers, N. Y.	103,056	37	6	.....	2	.....	1	.....	4
York, Pa.	52,770	.....	2	.....	.....	.....	5	.....	1
Zanesville, Ohio.	31,320	9	.....	.....	1	.....	.....	.....	.....

[1] Population Apr. 15, 1910.

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FOREIGN.

CUBA.

Communicable Diseases—Habana.

ble diseases have been notified at Habana as follows:

Disease.	Jan. 11-20, 1919.		Remaining under treatment Jan 20, 1919.
	New cases.	Deaths.	
			1
			17
	24		[1] 44
	1		4
			1
	3	4	[2] 32

[1] From the interior, 36. [2] From the interior, 21.

Influenza—Habana—Regla.

period January 11 to 20, 1919, 148 cases of influenza ies were notified at Habana, and 8 cases at Regla.

NORWAY.

Influenza—Christiania.

month of November, 1918, 225 fatal cases of influenza at Christiania, Norway, and during the month of 18, 82 fatal cases.

GUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

eports Received During Week Ended Feb. 21, 1919.[1]

CHOLERA.

	Date.	Cases.	Deaths.	Remarks.
	Nov. 17-Dec. 7	4	2	
	Nov. 30-Dec. 14		85	
	Dec. 8-14	7	3	
	Dec. 1-14	19	17	
rict	Nov. 5-18	544	316	
				Oct. 18-Nov. 27, 1918: Cases, 1,494; deaths, 840.
				Oct. 17-Nov. 27, 1918: Cases, 184; deaths, 104.
	Oct. 17-Nov. 27	119	47	
	Dec. 29-Jan. 4	4	3	

[1] officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Feb. 21, 1919—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Hongkong	Dec. 22-28	1	1	
Ecuador:				
Guayaquil	Dec. 16-31	6		
Taura	do	1	1	
India				Nov. 24-Dec. 7, 1918: Cases, deaths, 1,648.
Bombay	Nov. 17-Dec. 7	2	2	
Madras	Dec. 8-14	3	1	
Madras Presidency	do	286	202	
Rangoon	do	6	6	
Java:				
East Java—				
Surabaya district	Nov. 5-18	46	46	

SMALLPOX.

Canada:				
New Brunswick—				
St. John	Jan. 26-Feb. 8	5		
Nova Scotia—				
Halifax	do	27		
Quebec—				
Paspebiac	Jan. 26-Feb. 1	3		
China:				
Hongkong	Dec. 15-21	1	1	
Nanking	Oct. 5-Dec. 28			Present.
Denmark:				
Copenhagen	Dec. 22-28	1		
Do	Dec. 29-Jan. 11	8		
India:				
Bombay	Nov. 17-Dec. 6	7	1	
Calcutta	Nov. 30-Dec. 14		4	
Madras	Dec. 8-14	12	2	
Rangoon	Dec. 1-14	21	2	
Japan:				
Kobe	Dec. 15-28	68	25	
Do	Dec. 29-Jan. 4	37	3	
Java:				
East Java—				
Surabaya district	Nov. 5-18	8		
Mid-Java				Oct. 13-Nov. 27, 1918: Cases
West Java				Oct. 17-Nov. 27, 1918: Cases, deaths, 99.
Batavia	Oct. 17-Nov. 27	83	68	
Mesopotamia:				
Bagdad	Oct. 5-11	12		
Mexico:				
Mexico City	Nov. 3-Dec. 28	9		
Do	Dec. 29-Jan. 11	3		
Newfoundland:				
St. Johns	Jan. 26-31	1		
Outports—				
Bonavista	do	1		
Curling	do	3		
Philippine Islands:				
Manila	Dec. 29-Jan. 4	1		Variolold, 1.
Portugal:				
Lisbon	Dec. 22-28	194		
Union of South Africa:				
Johannesburg	Aug. 1-Sept. 30	5		Nov. 1-30, 1918: Cases, 4.

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ALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

During Week Ended Feb. 21, 1919—Continued.

TYPHUS FEVER.

Date.	Cases.	Deaths.	Remarks.
Jan. 6-12	1		
Jan. 19-25		1	
Dec. 23-29	1		
Dec. 30-Jan. 5	4		
Oct. 5-11	1		
Nov. 3-Dec. 28	190		
Dec. 29-Jan. 11	62		
Dec. 1-15	7		

YELLOW FEVER.

Dec. 16-31	1		
....do	45	21	
Jan. 30	1		At quarantine station, Canal Zone, Panama.

eived from Dec. 28, 1918, to Feb. 14, 1919.

CHOLERA.

Date.	Cases.	Deaths.	Remarks.
Nov. 17-30	4	5	
Aug. 18-Nov. 9	26	15	
Sept. 29-Nov. 30		67	Report for Nov. 23, 1918, missing.
Oct. 5-Nov. 30	134	92	
....do	10	10	
Aug. 1-31	5	5	
....do	98	71	
....do	110	89	
Oct. 7-Nov. 10	18	12	
Aug. 1-31	1		
			Oct. 7-21, 1918: Cases, 109; deaths, 94.
Oct. 7-28	92	75	
			Sept. 25-Oct. 16, 1918: Cases, 1,389; deaths, 867.
Sept. 25-Oct. 16	120	111	
			Oct. 2-Nov. 6, 1918: Cases, 212; deaths, 123.
Oct. 2-Nov. 6	161	95	
Oct. 11-18	8		
Sept. 22-Dec. 28	181	121	
			Nov. 2-9, 1918: Cases, 511; deaths, 417. Nov. 17-Dec. 28, 1918: Cases, 1,203; deaths, 858.
Dec. 15-21	1	1	
Nov. 17-Dec. 28	38	32	
Nov. 2-9	156	141	
Nov. 17-Dec. 28	79	65	
Nov. 2-9	19	17	
Nov. 17-Dec. 21	12	5	
Oct. 27-Nov. 2	5	6	
Nov. 17-Dec. 28	44	30	
Dec. 22-28	7	5	
Oct. 27-Nov. 2	38	28	
Nov. 17-Dec. 21	163	75	
Dec. 15-21	41	20	
Dec. 8-28	17	8	
Oct. 27-Nov. 2	9	6	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Feb. 14, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Contd.				
Provinces—Continued.				
Iloilo	Nov. 17–Dec. 21	70	51	
Laguna	Oct. 27–Dec. 28	18	11	
Mindoro	Nov. 24–30	4	5	
Misamis	Oct. 27–Nov. 2	6	5	
Do	Nov. 17–Dec. 28	75	48	
Oriental Negros	Nov. 2–9	20	8	
Do	Nov. 17–Dec. 7	6	6	
Pampanga	Nov. 24–Dec. 14	4	4	
Pangasinan	Nov. 2–9	236	192	
Do	Nov. 17–Dec. 28	428	313	
Rizal	Oct. 27–Nov. 2	3	1	
Do	Nov. 24–30	16	5	
Samar	Dec. 15–21	8	1	
Sorsogon	Nov. 17–23	8	4	
Tayabas	Nov. 2–9	7	4	
Do	Nov. 17–Dec. 28	54	25	
Union	Nov. 2–Dec. 28	18	14	
Zamboanga	Dec. 8–28	27	19	
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17–Aug. 21	2,943	1,455	In civil hospitals. In military hospitals, July 5–Aug. 21, 1918 Cases, 884; deaths, 783.

PLAGUE.

China:				
Amoy				Present.
Chungking	Dec. 1–7			Do.
Hongkong	Oct. 26–Dec. 8	1	1	
Do	Nov. 9–16	1	1	
Nanking	Nov. 2–9			Always prevalent.
Ceylon:				
Colombo	Oct. 27–Nov. 2	1	1	
Ecuador:				
Guayaquil	Nov. 1–Dec. 15	9	3	
Egypt				Jan. 1–Nov. 21, 1918: Cases, 337; deaths, 153.
India				Sept. 23–Nov. 23, 1918: Cases, 17,144; deaths, 13,401.
Bombay	Aug. 18–Nov. 16	36	25	
Karachi	Oct. 19–26	16	16	
Madras Presidency	Oct. 13–Nov. 30	624	422	
Rangoon	Oct. 5–Nov. 9	70	70	
Indo-China:				
Anam	Aug. 1–31	15	10	
Cambodia	do		23	
Cochin-China	do	14	11	
Saigon	Oct. 7–Nov. 3	3	1	
Java:				
East Java				Oct. 7–21, 1918: Cases, 17; deaths, 17.
Surabaya (district)	Oct. 7–21	15	15	
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 14; deaths, 14.
Samarang	Sept. 25–Oct. 16	6	6	
Siam:				
Bankok	Sept. 21–28	4	3	
Do	Oct. 5–12	2	2	
Venezuela:				
Caracas	Dec. 30	1		

SMALLPOX.

Algeria:				
Algiers	Oct. 1–Dec. 31	2	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22–28	1		
Do	Jan. 5–11	1		
St. John	Nov. 8–14	3		

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MALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

from Dec. 28, 1918, to Feb. 14, 1919—Continued.

SMALLPOX—Continued.

Date.	Cases.	Deaths.	Remarks.
Dec. 29–Jan. 4			Present.
Jan. 10			Do.
do			Do.
Dec. 7–28	10		
Jan. 5–25	40		
Dec. 29–Jan. 4			Do.
Jan. 5–25	2		
Jan. 19–25	1		
Jan. 12–25	5		
Jan. 24–Dec. 21	2		
Jan. 12–25	12		
do	2		
Dec. 15–21	1		
Dec. 29–Jan. 4	1		
			Aug. 1–Dec. 31, 1918: Cases, 133. Occurring at Colon, Panama, and various points in interior.
Jan. 1–25	28		
Dec. 15–21	1		
Dec. 29–Jan. 4	1		
Oct. 13–Dec. 8			Present.
Nov. 17–23			Do.
Nov. 10–30			Do.
Nov. 24–Dec. 21			Do.
Dec. 1–21			Do.
Nov. 30	2		
Nov. 9–Dec. 14	11		
Dec. 17–23	1	1	
Aug. 18–Nov. 16	13	3	
Sept. 29–Nov. 30		7	Report for week ended Nov. 23, 1918, missing.
Sept. 29–Oct. 5	1	1	
Oct. 5–Nov. 30	35	28	
Oct. 20–Nov. 23	2	2	
Aug. 1–31	29	8	
do	78	40	
do	97	27	
Oct. 7–20	13	3	
Aug. 1–31	5		
Oct. 26–Dec. 14	118	21	
			Oct. 7–21, 1918: Cases, 6.
Oct. 7–28	7		
			Sept. 25–Oct. 16, 1918: Cases, 55; Oct. 2–Nov. 6, 1918: Cases, 341 deaths, 122.
Oct. 2–Nov. 6	91	76	
Oct. 11–Nov. 15	154	33	
Nov. 24–30	1		
Sept. 22–Nov. 2	14		
Dec. 6–20	4		
Dec. 28–Jan. 24	3		
do	4		
Dec. 14–20	2		
Jan. 11–17	6		
Dec. 21–27	1		
Dec. 7–13	3		
do	4		
Dec. 14–20	1		
Jan. 18–24	1		
Dec. 7–13	4		
Jan. 11–17	6		
Dec. 7–13	60		Placentia Bay.
Jan. 18–24	2		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER Continued.

Reports Received from Dec. 28, 1918, to Feb. 14, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands:				
Manila	Nov. 2-9	2	2	
Portugal:				
Lisbon	Nov. 16-30	649	.....	
Portuguese East Africa:				
Lourenco Marques	.....	.....	.....	July 1-Oct. 31, 1918: 45 fatal c
Siberia:				
Vladivostok	Nov. 1-3	4	.....	
Spain:				
Cadiz	Oct. 1-31	.....	3	
Madrid	Sept. 1-Oct. 31	.....	153	
Seville	Nov. 1-30	.....	2	
Valencia	Nov. 10-Dec. 21	40	9	
Straits Settlements:				
Penang	Oct. 6-12	1	.....	
Union of South Africa:				
Cape Town	Aug. 1-30	1	.....	
Johannesburg	Oct. 1-31	7	.....	

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-30	.....	1	
Brazil:				
Ceara	Sept. 14-21	1	.....	
China:				
Antung	Dec. 2-15	2	.....	
Colombia:				
Barranquilla	Nov. 8-Dec. 28	.....	3	
Egypt:				
Alexandria	Oct. 14-Dec. 31	85	36	
Great Britain:				
Glasgow	Dec. 22-28	5	.....	
Greece:				
Saloniki	Sept. 29-Dec. 7	.....	28	
Japan:				
Nagasaki	Nov. 10-Dec. 22	12	4	
Java:				
East Java	.....	.....	.....	Oct. 7-21, 1918: Cases, 1
Surabaya	Oct. 7-21	4	.....	
Mid-Java	.....	.....	.....	Sept. 25-Oct. 16, 1918: Cases,
West Java	.....	.....	.....	Oct. 2-23: Cases, 31, deaths,
Batavia	Oct. 2-23	15	4	
Mexico:				
Guadalajara	Nov. 1-30	2	.....	
Mexico City	Sept. 22-Nov. 2	244	.....	
Siberia:				
Vladivostok	Sept. 1-Nov. 30	16	.....	
Spain:				
Huelva	Oct. 1-31	.....	2	
Union of South Africa:				
Port Elizabeth	Sept. 14-28	.....	.....	Present among natives in s interior towns.

YELLOW FEVER.

Brazil:				
Pernambuco	Oct. 1-Nov. 30	2	1	
Ecuador:				
Babahoyo	Nov. 1-30	1	.....	
Duran	Nov. 1-Dec. 15	2	2	
Guayaquil	....do	118	66	
Milagro	Nov. 1-15	1	.....	
Punta de Piedra	Nov. 1-30	1	.....	
Salvador:				
San Salvador	Jan. 9	1	.....	

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JBLIC HEALTH REPORTS

34 FEBRUARY 28, 1919 No. 9

JOINT INFLUENZA COMMITTEE.

e Surgeon General of the Army, the Surgeon General of the y, the Surgeon General of the Public Health Service, and the ctor of the Census have designated officers from their respective rtments to form a joint influenza committee. The members of ommittee are as follows:

ureau of the Census.—Dr. William H. Davis (chairman), Mr. C. S. ne.

ublic Health Service.—Dr. Wade H. Frost, Mr. Edgar Sydenker.

nited States Navy.—Lieut. Commander J. R. Phelps, Surg. Carroll

nited States Army.—Col. D. C. Howard, Col. F. F. Russell, Lieut. A. G. Love.

ne functions of the committee are to study the epidemic and to e comparable, so far as possible, the influenza data gathered by Government departments.

A UNIFIED HEALTH SERVICE.[1]

By B. S. Warren, Assistant Surgeon General, United States Public Health Service.

Within certain limitations a people can have such hygienic conditions as they choose to buy. In other words, "hygienic conditions" purchasable, and they are safe-paying investments. No State ernment should delay making such investments on account of cost. It is now well known from many demonstrations that n under the worst conditions a reasonable expenditure of public ds will afford such protection against disease as to pay large dends, not only in the saving in human life and suffering but in dollars and cents.

t is hardly necessary to tell an Alabama audience that Gorgas, ter, and their assistants made the Panama Canal possible. This nonstration was a wonderful achievement and of itself should be icient to cause Gorgas's native State to profit by the example invest in health work which, beginning at the capital, would ch into the remotest community of the State.

[1] Read before the Birmingham (Ala.) Civic League, Jan. 13, 1919.

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Of more recent date, and nearer home, is the health work w protected the soldiers in the camps of this country during the m zation of the millions of men. By the cooperation of the mil and civil health authorities there were established in the camps zones about the camps, health organizations which controlled communicable diseases in a record-breaking degree for armi the field.

Within the boundaries of the camps themselves the Army h authorities were responsible for proper hygienic conditions. I extra-cantonment zones the Public Health Service, in cooper with State and local health authorities, was responsible. Be worked together and the results may well be called a "unified h service." Aided by funds from the American Red Cross and authorities, the Public Health Service established complete h organizations in 51 extra-cantonment zones. In all, the P Health Service expended $1,201,909, the American Red $507,000, and the States and local authorities, $650,000. The population protected by these organizations was approxim three and three-quarter million persons, in addition to the m population. It is not possible here to enumerate all of the done, but to illustrate: Two thousand five hundred miles of d were dug and 1,200 square miles of swampy territory drained an antimosquito zone—1 mile in width—was established around camp. It is a well-known fact that malaria, which was a s potential disability factor about many of these camps, was tically eliminated from the soldier population, and only 3,160 were reported to the Public Health Service during the m season of 1918 among the civil population of three and three-q million, a rate of 83 per 100,000. From such data as were a able for previous years this was a tremendous reduction i malarial rate in these communities. These results may w compared with those in Panama, especially since they were ob not under military conditions, but through the voluntary wor civil population.

In considering whether or not an adequate health machine is while it is well to examine the health records and weigh the va the results to be expected according to the following standards

1. The human standard of sorrow and suffering caused by pr able diseases;

2. The actual cost in money of preventable sickness; and

3. The saving to the State of the economic values lost in pr able sickness and death.

One can not place a money value on the sorrow endured mother over her baby dead from a preventable cause, nor sorrow caused by a defective or blighted child, due to preve

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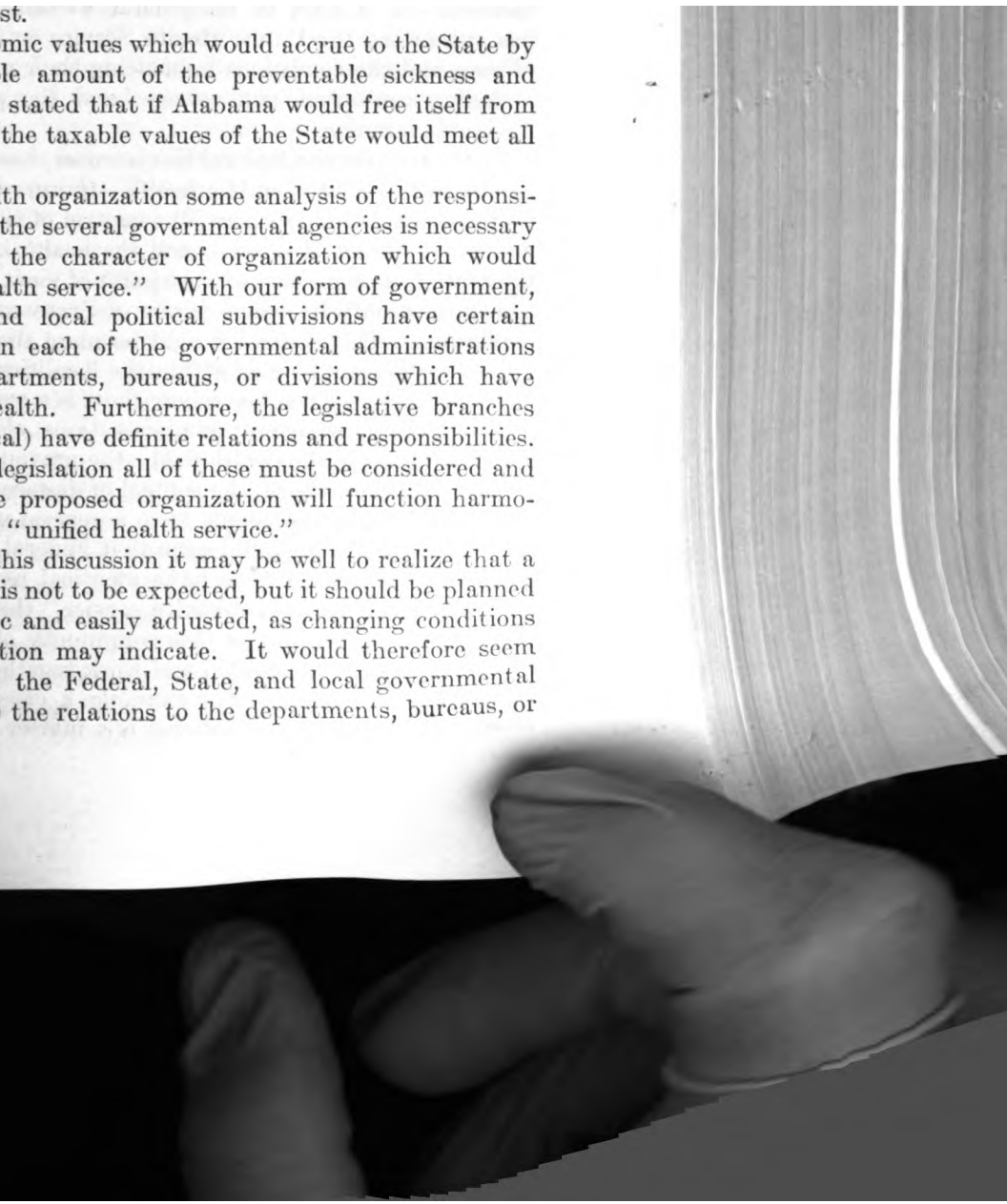
st.

mic values which would accrue to the State by
le amount of the preventable sickness and
stated that if Alabama would free itself from
the taxable values of the State would meet all

th organization some analysis of the responsi-
the several governmental agencies is necessary
the character of organization which would
lth service." With our form of government,
nd local political subdivisions have certain
n each of the governmental administrations
artments, bureaus, or divisions which have
ealth. Furthermore, the legislative branches
al) have definite relations and responsibilities.
legislation all of these must be considered and
e proposed organization will function harmo-
"unified health service."

his discussion it may be well to realize that a
is not to be expected, but it should be planned
c and easily adjusted, as changing conditions
tion may indicate. It would therefore seem
the Federal, State, and local governmental
the relations to the departments, bureaus, or



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divisions which are more or less directly interested in the health
the people.

The Federal Government has at least three definite responsibili
in the field of public health—international control of disease, int
state control of disease, and a general interest in the health of all
people from the general welfare point of view. For the internatio
control it operates the maritime quarantine, and supplements
by the work of its consular service and the detail of Public He
Service officers to the places which are likely to become a men
For the interstate control of disease, the Federal Government un
several acts of Congress undertakes certain measures, mainly thro
cooperation with State and local health authorities, and uses
Public Health Service for this purpose. In the past, the Pu
Health Service has largely confined itself to measures of control
the disease needing control had gained a foothold in a State
become a menace to other States. Under more modern meth
however, it has realized that its activities should be aimed at t
diseases long before they become a menace. As an example of
latter methods, the Service is inaugurating a system of contro
water supplies furnished to the traveling public by interstate com
carriers. As a part of its general welfare interest, the Con
has authorized the Public Health Service to investigate the dise
of man and the conditions influencing their propagation and spr
including sanitation and sewage, and the pollution of lakes
navigable streams.

The State, like the Federal Government, has at least three resp
bilities in the field of public health—the prevention of the intro
tion of disease from without, the control of the intercounty, or i
municipal spread of disease, and the health of all the people w
the State from a general welfare point of view. These responsibi
can be met only by some degree of State control over local h
conditions. This control should be more than advisory and sh
be applicable at all times within the localities and not limited t
times and places when and where there is a menace to other local

The local government administrations also have at least
responsibilities in the health field—the prevention of the introdu
of disease from without, the control of disease within the jurisdic
and the health of the people from a general welfare point of vie

From the above it would seem that Federal, State, and local h
authorities in some degree have identical responsibilities. The
we are to have a "unified health service" there should be very
cooperation on account of this community of interest; in fact,
not form a joint partnership and work together for the one serv
prevention of disease? For example, a case of typhoid fever
remote rural district of Alabama is a matter of joint interest t

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State, and Federal health authorities. The typhoid germ
recognize county or State lines and may find its way into
d interstate traffic and cause the loss of many human lives
expenditure of large sums of State and Federal funds. The
procedure would be to form the partnership and prevent or
ll preventable diseases at their source. In the formation of
nership due consideration must be given in its organization
her departments, bureaus or divisions and groups of people
e more or less directly interested in health work. The most
t of these may be mentioned as follows: The medical pro-
nd an adequate medical service for all the people; the child
gencies and the prevention of infant mortality; the depart-
education and the health supervision of the school children;
rtment of Labor and the health of the workers; the Depart-
Agriculture and the rural health; the various groups inte-
the control of special disease, like venereal diseases, tubercu-

se days of progress in preventive medicine there is some
to separate too sharply the preventive from curative
. It should not be forgotten that an adequate medical
o the whole people will do more to prevent disease and
than any other single measure to be considered. At
he people in the United States are paying out money suffi-
the maintenance of an adequate medical service, but fail to
t. This money, however, is spent in such a haphazard
that the service is not only often inadequate or worthless
imes actually harmful. For one item—drugs—the United
pends $500,000,000 a year. This sum alone, if properly
d, would buy all necessary drugs and add $2,000 a year to
me of each of the 125,000 physicians in active practice in
ted States. It may be safely stated that an adequate
service can not be had except in our medical centers, and in
nters only the rich and some of the charity patients receive
vice. The great middle class can not afford such expense.
e people as a whole are paying the price for the best, there
e no reason why they should not have the best. With a
rganization, distribution, and training of the medical and
personnel of the country, and a proper expenditure of the
w being spent for medical purposes, there would be available,
person, adequate medical and hospital services and supplies.
ch service closely coordinated with, or forming part of, the
epartment, it needs no argument to show that disease pre-
would begin at the source—the bedside, and eliminate a
portion of disease spread.

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In some governmental administrations there have grown outside of the health departments, child-welfare agencies w have practically taken over the matter of prevention of in mortality. These agencies may have assumed this responsibi but health departments can not thus escape their responsib for infant health. This is but a part of the whole question of p health, and child welfare agencies must be auxiliary to health partments or be made a part of them in so far as the infant heal concerned. Without doubt these activities should be so correl as to prevent duplication of work, and that part of the work w relate to medical and sanitary matters should be the partic province of the health department.

The relations of the departments of education to health de ments have likewise to be considered in any unified health-se program. Like child-welfare agencies, the departments of educ in some jurisdictions have taken on health functions and have or ized school-hygiene divisions, more or less independent of the h departments. Where the school-hygiene divisions are doing work the organization should be utilized, but it should be bro under such relation to the health departments that it woul auxiliary to that of the health department. So far as the int school administration is concerned, it may be necessary to hav health work under the immediate control of the school boards the standards governing the health work should be fixed by health departments. Furthermore, the medical inspection of children should be under such supervision by the health depart that the findings may be of the greatest service in the contr disease. It should be clearly recognized that the health departm are responsible for health conditions in all age groups, and that in the school-age group are not to be excepted. Further it sh also be clearly recognized that only the questions of health w relate to the child's ability to attend school regularly and to lear lessons are the concern of the school authorities, and only then far as they are responsible for the efficient expenditure of educat funds.

Industrial hygiene is another subject which must be given ca consideration in working out a unified health-service program. labor departments are vitally concerned in this subject. The Labor Board announced as one of the principles governing its aw a living wage sufficient to maintain a family in health and com With such a recognition of the importance of health it then bec the duty of the health departments to work out the standard health in industry and to cooperate with the labor departmen their enforcement. In this group of the population, as in s children, it should be clearly recognized that the health departm

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onsible for the health of all the people and that the industrial are no exception. Labor departments should not therefore independent health bureaus or divisions but should call e health departments to do this work for them.

matter of rural hygiene, there has been much study and tion of rural health conditions. These have shown the great permanent health organization in this field. The results by such organizations under intelligent direction have rated their value, but progress is slow. Something must be stimulate the development of rural hygiene. The Federal e authorities, as well as the local governments, have a definite ility and should make common cause of this work and agree king plan which will place rural health service at least on a urban health work, as exemplified in our progressive city epartments.

leaving this question of the relation of health departments departments, bureaus, and agencies, it would be well to r that the volunteer and endowed health agencies will be be a great help in developing a "unified health service" re utilized in a proper manner. In all places where to-day st they should be consulted and some practicable plan ut for using them and bringing them under proper govern- ontrol. At present some of these agencies are developing ent organizations which are exercising some sort of direction nment health affairs. In a democratic government there e no agency directing governmental administration which is nsible to the people. Such agencies must be controlled and xiliary to Government administration.

ing now to State health organizations, I may say that Surgeon Fox, of the United States Public Health Service, has made studies of many State health organizations and, upon the f the several State authorities, has submitted recommenda- their improvement. A review of these reports shows a niformity in most of the essential recommendations, which t as follows:

health activities should be brought together into one de- t—the health department.

ere should be a small State board of health (seven) with and quasi-legislative functions, appointed for a definite office (seven years), with the terms so arranged that only will expire within one year.

ere should be one chief executive of the health department, uld be held responsible for the proper administration and ent of all the health laws and regulations. He should be a lled in knowledge of preventive medicine, with experience in

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health work and health administration. He should be appointed a term of years (six), and his tenure of office should be subject to efficiency and good behavior. He should give all of his time his office and not engage in the private practice of his profession

4. The department should be composed of bureaus or divisions charge of chiefs who give all of their time to their work. The bure or divisions recommended vary somewhat according to States, are generally as follows (the names indicating the functions): Vital statistics; (*b*) communicable or preventable diseases, or demiology; (*c*) public-health engineering; (*d*) infant welfare, or c hygiene and school hygiene; (*e*) health education; (*f*) food and dr (*g*) industrial hygiene; and (*h*) administrative or clerical.

The number of bureaus or divisions and the duties vary accor to States, depending upon local conditions. I should state that highly advisable to leave the number and duties of the division the discretion of the department, to be created as necessity arise

5. The State should be divided into convenient health distr varying according to local necessity from 4 to 20, each district t in charge of an all-time district health officer. Under the direc of the health department these officers should have sufficient aut ity over local health administration in their districts to enforce State health laws and regulations, but not thereby relieving the health authorities of their local responsibility.

6. The appointment of all chiefs of bureaus or divisions, dis health officers, engineers, scientific personnel, public health nu and employees should be for a probationary period and after s factory examination. These appointments should be permar subject to efficiency and good behavior. The field officers sh constitute a mobile corps subject to change of station within State. In addition to the value of a trained health personnel, seems to stress in his reports the value of public health nurses advises their employment in such numbers as the appropriation warrant.

7. There should be an annual conference of the State field fo and local health officers with the health department.

8. In the matter of amount of appropriations, Dr. Fox varies recommendations considerably, but states that where practicab per cent of the State revenue should be devoted to State health w and 2 per cent of county revenues to local health work. But in cities a larger per cent would be required for city health work.

9. Concerning laws and regulations governing measures for dis reporting and control, milk supplies, water supplies, sewage disp and the like, the recommendations are numerous and vary consi ably according to local conditions.

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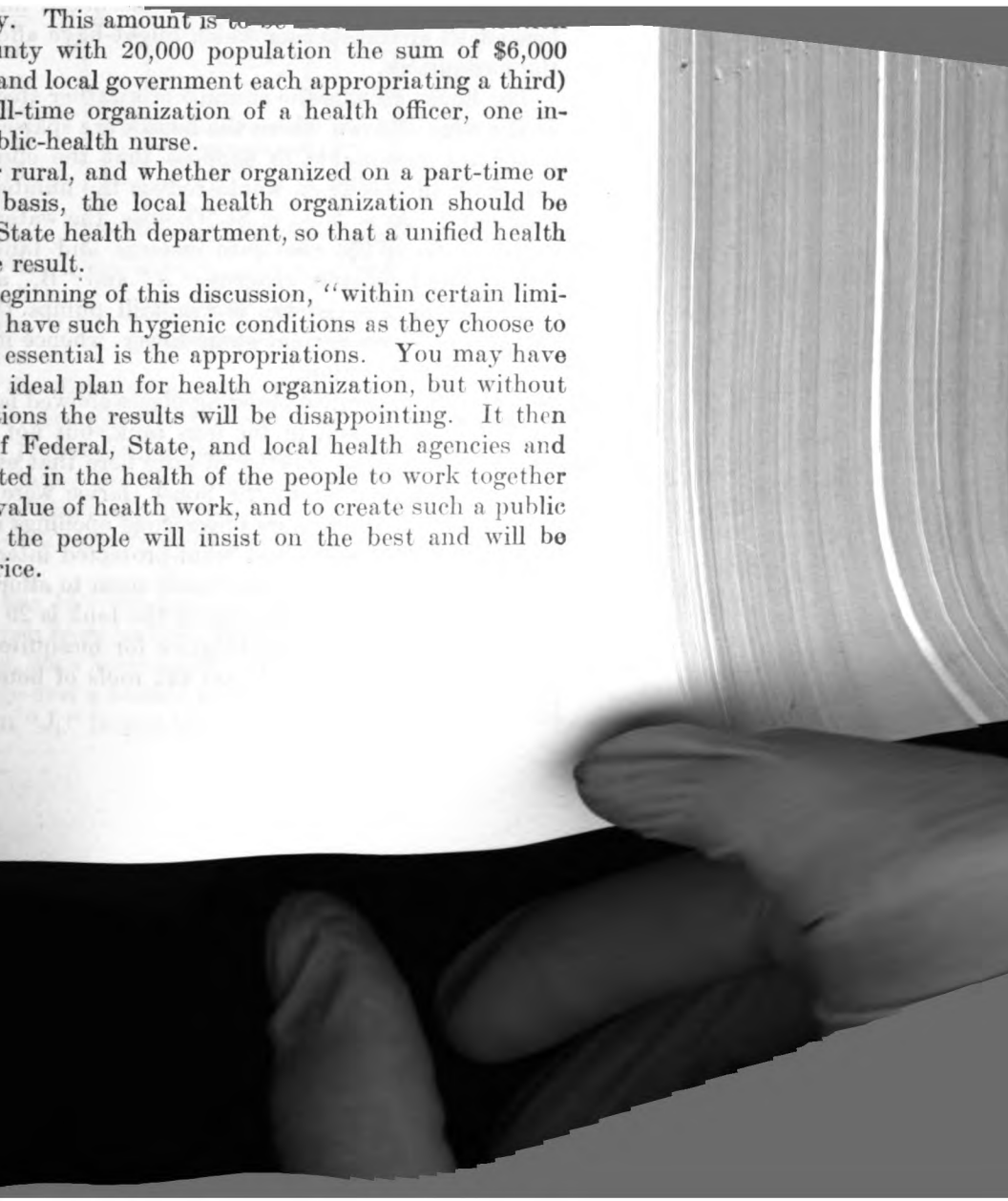
y. This amount is to be [illegible]
unty with 20,000 population the sum of $6,000
and local government each appropriating a third)
ll-time organization of a health officer, one in-
blic-health nurse.
rural, and whether organized on a part-time or
basis, the local health organization should be
State health department, so that a unified health
result.
eginning of this discussion, "within certain limi-
have such hygienic conditions as they choose to
essential is the appropriations. You may have
ideal plan for health organization, but without
ions the results will be disappointing. It then
f Federal, State, and local health agencies and
ted in the health of the people to work together
value of health work, and to create such a public
the people will insist on the best and will be
ice.



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A NOTE ON THE FLIGHT OF MOSQUITOES THROUGH HORIZONTAL WATER PIPES.

By W. W. KING, Surgeon, United States Public Health Service.

An attempt to get rid of or to materially reduce the excessive number of mosquitoes at my own residence in St. Thomas, Virgin Islands, resulted in some very interesting experiences and brought to my attention certain points in the habits of mosquitoes which apparently have a practical application in antimosquito work, but to which I can not find reference in the literature at my command.

In various works treating of mosquitoes and measures for their extermination, I found reference to the necessity of screening the downspouts leading into cisterns, but no distinction was made between the spouts which descend perpendicularly and those running more or less horizontally for some distance. The following observations, so far as they go, indicate that mosquitoes do make a distinction, because they readily utilized perpendicular spouts to pass in and out, but did not enter through spouts that had a considerable horizontal section. On the other hand, horizontal pipes nearly 200 feet in length were no hindrance to their escape when they were breeding in cisterns. The conditions under which these observations were made are given in considerable detail for the better comprehension of circumstances which might have affected the behavior of the mosquitoes.

The house crowns the summit of a rather steep hill, 240 feet high, at the edge of town where the houses are sparsely scattered. Hence it seemed reasonable to suppose that the elimination of breeding places on the premises would reduce the number of mosquitoes to a minimum. As is usual in St. Thomas, the water supply is rain water collected from the roof into cisterns and tanks, in this case two underground concrete cisterns, "A" and "B," and a small iron tank "C." From the cisterns a windmill pumps the water to a cedar tank, "D," in an ancient stone tower, whence it is piped throughout the house. (See plan.)

Search for mosquito breeding places showed larvæ in good numbers in both cisterns and in the iron tank, but not in the tank "D" in the tower, and it is worthy of note here that even when mosquitoes were most abundant in the house, larvæ were never found in this tank, although there were unscreened openings in its board covering, and the dimly lighted and wind-protected interior of the tower and the always-open door below would seem to afford a favorable avenue to the water above. The rim of the tank is 29 feet above ground, a height apparently not prohibitive for mosquito breeding, because I have found larvæ in tanks on the roofs of houses in St. Thomas at much greater heights.

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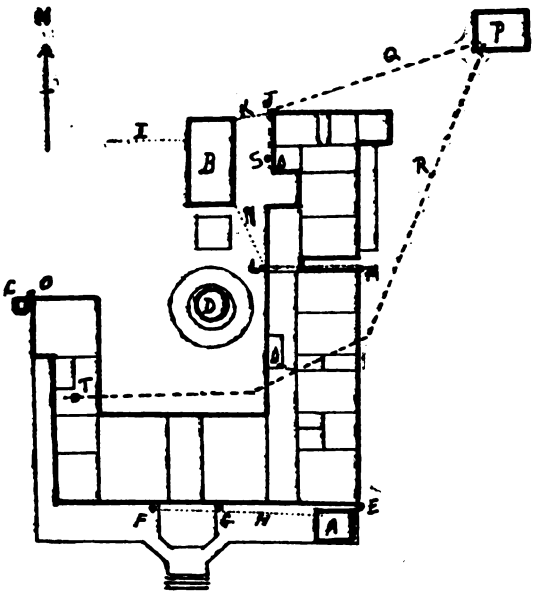
he cistern "A" under the front veranda had a close-fitting trap- always closed, and the overflow outlet was well screened, so that only means by which mosquitoes could enter or leave this cistern by the unscreened in-flow pipes from the roof. A 2½-inch down- t "E" descends perpendicularly except for the lower 2 feet, e it bends at an angle of 22.5 degrees, then makes a right-angle into the cistern. The entire length of this spout is 14 feet. The spouts "F" and "G," 4 inches in diameter, discharge into the rn through a horizontal pipe "H," 4 inches in diameter from "F" G," and 5 inches from "G" to the cistern, a distance of 32 feet. squito larvæ disappeared shortly after the downspout "E" was ned. "F" and "G" were left unscreened, but larvæ never peared in this cis- although mosqui- were abundant in house and on the da for several hs later.

e slight deviation e course of the up- spout "E" was no cle to the passage squitoes, yet they ot enter by the way through "G" and (12 feet down and eet horizontally), r on account of the nce or the horizon- direction, or both rs combined, al- gh the size of the was larger than



Approximate scale: 1 inch=40 feet.

As shown by the flicker of a candle flame, there was a slight rd current of air through the horizontal pipe, but it was less that through the perpendicular spout, against which mosquitoes nter the cistern; hence the air current could hardly have been tor. If anything, these air currents, by carrying the scent of vater upward, would have favored the use of the pipe "H" by quitoes.

e cistern "B" has two mosquito-proof trapdoors but one of had remained open more or less constantly. A 6-inch overflow "I," 25 feet long, runs horizontally just beneath the surface of round to discharge over a terrace wall. Water enters the cistern 4-inch downspout "J," 10 feet high, through a 4-inch horizontal

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pipe "K," 12 feet long; and by the downspouts "L" and "M," through the horizontal pipe "N." The spout "L" runs downward about 12 feet, and the horizontal section "N," from "L" to the cistern, is 20 feet in length; both are 5 inches in diameter.

None of these pipes were screened yet the mosquito larvæ disappeared from the cistern after the trapdoor was kept constantly closed, and reappeared only once later, in small numbers, probably from mosquito eggs deposited on the water in a sagging gutter, and washed into the cistern. No more larvæ were noticed after repairs were made to the gutter.

It is believed that the mosquitoes which hatched in this cistern after the trapdoor was permanently closed, and those hatched from larvæ remaining in cistern "A" when the spout "E" was screened found their way out through the unscreened spouts in spite of their horizontal sections, aided possibly by the upward air current. A comparatively strong current of air entered cistern "B" through the overflow pipe and passed out with less force, through the rain spouts, but none of the air currents were sufficiently strong to hinder the flight of mosquitoes. A considerable portion of the surface of the water in these cisterns could be observed for dead mosquitoes but only an occasional one was seen, too few to account for the number of larvæ which had been present.

To test this point, a jar containing some hundreds of pupæ and well developed larvæ was suspended in cistern "B," and the spouts were screened to catch the mosquitoes at the point of escape. When observed some days later it was found that the screens had been imperfectly fastened and had become disarranged by heavy rains so that mosquitoes could easily pass. The mosquitoes had hatched and disappeared, but as none were caught the experiment was inconclusive, and it can only be supposed that the mosquitoes escaped by the rain pipes as the only way out.

The iron tank "C" has a small overflow opening on one side and a number of small holes in the top. One 3-inch downspout "O" descends perpendicularly from the roof, a distance of 10½ feet. All openings were screened or plugged except this spout, yet mosquito larvæ persisted until the spout also was screened.

The plague of mosquitoes was only slightly if at all diminished by the elimination of the cisterns and tank as sources of supply. Search for other breeding places was unsuccessful for a long time until the septic tank "P" was opened. Mosquitoes by the hundreds flew out of the opened trap, and the foul water at the bottom was teeming with larvæ. This tank had not been considered a possible breeding place as it was thought to be inaccessible to mosquitoes because the trapdoor was always tightly closed and the ventilator was effectively

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ned. The only other openings are the 4-inch drain "Q" and -inch drain "R" carrying water-closet, bath and kitchen waste the house. At the highest points in each drain are ventilating , "S" and "T," 2½ and 4 inches in diameter.

asmuch as mosquitoes did not seek the water in the cisterns gh horizontal rain pipes comparatively short in relation to the s, it is not presumable that the female mosquitoes would enter ventilators and traverse the long horizontal pipes to reach the in the septic tank. Yet this water was alive with larvæ, a apparently explainable in only one way; that the mosquito ited her eggs on the water in the bowls of the toilets, and they flushed through the drains into the septic tank where the larvæ oped.

e mosquitoes bred in this place had but one way to escape, was to fly back up the drains and out the ventilating pipes. horizontal distance to the bottom of the nearer outlet, "S," is et, and to the farther one, "T," 191 feet. The upright venti- are 13 and 14 feet high, respectively. Positive evidence that nosquitoes did escape by this route was secured by covering the lator hoods with cloth netting and catching a large number of uitoes inside the netting. In their passage upward through rains, the mosquitoes were probably aided somewhat by an rd current of air. The odor of kerosene thrown on the water e tank was perceptible at the nearer ventilator in about five tes.

a few days after screening the ventilators and oiling the septic the plague of mosquitoes sensibly diminished, and in a short the house was practically free from them. These mosquitoes roughly identified as *Culex quinquefasciatus*. At first there had some white-striped mosquitoes apparently Aëdes, but they were een after the cisterns and iron tank were free from larvæ.

e chief points of these observations are as follows: (*a*) Mosquitoes ed and left cisterns through unscreened perpendicular water- s 2½ and 3 inches in diameter and 14 and 10 feet high.

Mosquitoes did not enter cisterns through larger unscreened spouts when these pipes had a horizontal section from 12 to et long. No observations were obtained of a horizontal distance s than 12 feet.

Mosquitoes bred in the cisterns and septic tank and having no means of exit passed through horizontal pipes 4 and 5 inches ameter for a distance of 191 feet in the longest instance, aided ably to a certain degree by air currents. No doubt they would through greater distances, but there was no opportunity to ve any instance of it.

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These observations deal with only one or two species of mosquito and are limited in number and circumstances, but if they should b generally true under conditions ordinarily met with in antimosquit work, then they have an actual practical value.

In accordance with these facts it seems unnecessary to scre waterspouts and other pipes into cisterns and similar deposits water when such pipes have a considerable horizontal section. Th saving in this way of time, labor, and materials may be quite appr ciable. However, the screening of such openings will be required those instances where mosquitoes are breeding from eggs carri into the water from an outside place of deposit.

Sewers, cesspools, etc., may be breeding places of certain kinds mosquitoes, and their possible passage for considerable distance the soil and drain pipes must be considered. Such pipes are usual trapped near the sewer or cesspool, but not always, especially in o constructions and in localities where plumbing laws are lax or no existent. It is probable that the most important antimosquito wo is done in the smaller towns, villages, and isolated houses, whe local deposits of water are apt to be found in place of a piped wat system.

EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

Telegraphic reports received by the United States Public Heal Service for the week ended February 22, 1919, indicate that the has been little change in the number of cases of influenza report throughout the United States. These reports are received fr State health officers and from zones surrounding Army camps.

As compared with the week ended February 15, decreases in t number of cases notified are reported from Arkansas, Californ Florida, Louisiana, Maine, New Jersey, and Vermont. Increas are reported from Alabama, Connecticut, Illinois, Iowa, Kans North Carolina, and Virginia. The number of cases is not lar however, and the increases in most instances are very slight.

The following table shows the number of cases of influenza report in the zones surrounding military camps in the United States fr December 29, 1918, to February 22, 1919, inclusive, by weeks. T cases reported from September 15 to December 28, 1918, are sho in the Public Health Reports, vol. 33, No. 49, December 6, 191 pages 2153-2154, and vol. 34, No. 1, January 3, 1919, pages 1-2.

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Cases of influenza reported in extra-cantonment zones.

State and zone.	Cases reported week ended—							
	Jan. 4	Jan. 11	Jan. 18	Jan. 25	Feb. 1	Feb. 8	Feb. 15	Feb. 22
ampshire and Maine:								
tsmouth-Kittery sanitary district	58	79	41	43	58	9	0	0
usetts:								
ens	71	57	39	9	2	2	1	0
sey:								
	25	4	42	0	6	4	0	3
dge	106	95	90	92	99	37	29	34
rman	26	6	38	26	14	13	23	4
ge	13	12	0	2	0	4	0	0
ston	36	82	36	37	15	4	12	30
rsworth	27	24	45	28	40	17	6	0
:								
aphreys	16	105	119	168	109	73	97	134
	466	398	182	27	112	33	89	66
smouth and Norfolk County								
alth district	155	465	325	180	149	54	28	134
rwater health district	151	9	27	23	30	15	10	1
arolina:								
ctieville sanitary district	47	58	229	195	83	6	20	13
me	62	46	65	35	(1)			
	249	379	634	500	280	166	144	102
ington sanitary district	34	37	277	382	186	45	28	19
arolina:								
ston sanitary district	166	97	277	449	224	61	20	19
son	45	5	337	726	136	99	27	17
r	141	286	401	431	288	169	226	15
sworth	38	34	172	153	34	24	19	
and Flame School	89	129	220	163	75	65	31	32
on	52	113	165	262	192	75	66	8
cock	188	537	1,036	267	54	10	3	11
e Acid Plant	10	15	33	33	57	23	8	7
ber Field					94	59	100	35
ver	27	75	103	82	17		1	1
ston	15	39	159	143	98	(1)		
y and Indiana:								
or	237	284	180	188	134	82	90	305
e and Georgia:								
thorpe	61	29	28	30	34	19	17	0
:								
ellan	6	26	68	15	9	8	0	2
dan	0	15	21	17	0	0	0	0
pi:								
port health district	585	743	810	389	242	134	91	64
:								
ts	88	50	82	106	13	6	15	12
a:	132	241	668	527	133	67	53	
regard	174	198	126	148	19	23	1	
ber Field	82	75	62	40	43	17	13	11
a:								
phan	12	1	27	0	(1)			
ia	9	18	11	6	6	9	1	
n	5	12	0	22	1	0	2	0
Arthur	2	10	18	7	(1)			
is	106	203	253	133	34	16	9	7
ton:								
erton	1	244	126	129	35	(1)		
s	18	25	40	5	2	6	8	0
nover	41	186	367	109	0	(1)		

[1] Reports discontinued.

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THE VENEREAL CLINICS AND DETENTION HOMES OF THE PUBLIC HEALTH SERVICE.

While a large part of the campaign against venereal disease is educational in character it is indispensable also to provide clinics and detention homes where the venereally infected can secure advice diagnosis, and treatment.

In developing this phase of its work the Public Health Service through its Division of Venereal Diseases, now operates 102 clinics for the free treatment of venereal diseases and 33 detention homes for the quarantine and treatment of infected persons; 29 of the 33 detention homes are in direct cooperation with the clinics operating in the extra-cantonment zones or the so-called United States Government clinics. In most cases these detention homes are operated by the clinic personnel.

The following statistical report covers the activities during the month of January of only 15 clinics and 13 detention homes, 12 of the latter being in direct cooperation with the United States Government clinics. Reports from the remaining clinics and detention homes were not received in time to be included in this report. The average number of days each of the 15 clinics were open was 25.5.

TABLE I.—*Patients under care of clinics.*

Sex, age, group, and color.	Total under care of clinics.	Remaining from last month.	New patients admitted.	Discharged—		Discontinuing treatment—		Died.	Remaining under treatment—	
				As non-infectious but not cured.	As probably cured.	With permission.	Without permission.		In clinics.	In institutions.
Male:										
15 years and over—										
White	1,691	1,303	388	.....	72	73	191	.....	1,345	1
Colored	2,503	1,982	521	7	131	160	206	.....	1,992	
Under 15 years—										
White	25	18	7	.....	.....	2	.....	.....	21	
Colored	40	29	11	.....	.....	2	2	.....	36	.....
Female:										
15 years and over—										
White	1,456	1,169	287	36	106	93	101	1	980	2
Colored	1,558	1,271	287	17	62	76	159	3	1,162	1
Under 15 years—										
White	51	42	9	.....	1	2	.....	.....	41	
Colored	51	36	15	.....	1	2	.....	.....	47	
Total	7,375	5,850	1,525	60	374	410	659	4	5,534	3

Table I shows that there were 7,375 patients listed in the active files of the 15 clinics and the detention homes. Of the 1,525 new patients admitted during the month 1,500 were admitted at the clinics the remaining 25 being sent direct to a detention home operating independently of any of the clinics. The average number of patients admitted during the month at each of the clinics would, therefore equal 100. It will be noted that 374, or 24.8 per cent, of the patients terminating treatment were discharged as probably cured, and 60

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er cent, were discharged as noninfectious but not cured. t striking feature of Table I is the fact that 659, or 43.7 per the patients terminating treatment discontinued without on. The number of patients remaining under treatment ary 31 was 5,868, of which 5,524 were under treatment at s and 344 in the detention homes.

7,375 patients there were 6,612 who were actually treated, ining 763 being under observation. To the 6,612 patients re 19,796 treatments administered, 5,796 of which consisted ministering of asphenamine, 4,953 doses to infectious cases, o noninfectious cases of syphilis. In addition to the actual ts there were 1,959 examinations and consultations with- ment. There were also 583 prophylactic treatments given ics operating in the extra-cantonment zones at San Antonio, Little Rock, Ark.

TABLE II.—*Record of attendance at clinics.*

Sex, age, group, and color.	Total number of visits to clinics.	Voluntary visits.	Involuntary visits.	Visits due to persuasion.
d over—				
	3,521	3,128	287	106
d	4,292	3,735	419	138
ears—				
	78	74	1	3
d	44	41	.....	3
d over—				
	3,319	2,088	1,134	97
d	3,124	2,014	942	168
ears—				
	114	95	14	5
d	86	52	32	2
l	[1] 15,705	[1] 11,912	[1] 3,170	[1] 623

[1] Included in these totals are visits made by patients whose color was not stated.

mber of visits to the clinics as shown in Table II equals a daily average attendance of 41.1 at each of the clinics. clearly shows that the number of voluntary visits far exceeds untary visits. It is especially interesting to note that 623, cent, of all the visits to the clinics were due to the persuasion ial workers and nurses comprising the clinic personnel.

the month there were 239 patients placed in detention, om were females. It was found that of the total number of 8.2 per cent were found infected with venereal diseases.

oratory work of the clinics may be summarized as follows:

n examinations	1,528
examinations for Treponema pallidum	55
examinations for gonococci for diagnosis	2,476
examinations for gonococci for release	1,342
l	5,401

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DEATHS DURING WEEK ENDED FEBRUARY 15, 1919, IN CITIES.

The following table shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended February 15, 1919. The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown.

The data are taken from the "Weekly Health Index," February 18, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended February 15, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual rate per 1,000.
Albany, N. Y.	112,565	47	21.8	C 19.0	16	7.4
Atlanta, Ga.	201,732	72	18.6	C 19.1		
Baltimore, Md.	[2] 669,981	313	24.4	A 20.0	117	9.1
Birmingham, Ala.	197,670	84	22.2	A 18.8	28	7.4
Boston, Mass.	785,245	262	17.4	A 18.0	71	4.7
Buffalo, N. Y.	473,229	187	20.6	C 15.3	35	3.9
Cambridge, Mass.	111,432	28	13.1	A 16.6	3	1.4
Chicago, Ill.	2,596,681	903	18.1	A 17.3	235	4.7
Cincinnati, Ohio.	418,922	162	20.2	C 21.2	37	4.6
Cleveland, Ohio.	810,306	249	16.0	C 12.2	80	5.2
Columbus, Ohio.	225,296	68	15.7	C 21.3	15	3.5
Dayton, Ohio.	130,655	38	15.2	C 15.6		
Denver, Colo.		101				
Fall River, Mass.	128,392	41	16.7	C 18.7	15	6.1
Grand Rapids, Mich.	135,450	33	12.7	C 9.6		
Indianapolis, Ind.	289,577	98	17.6	C 13.9		
Kansas City, Mo.	313,785	134	22.3	C 20.6	51	8.5
Los Angeles, Cal.	568,495	160	14.7	A 15.3	21	1.9
Louisville, Ky.	242,707	85	18.3	C 21.7	19	4.1
Lowell, Mass.	109,081	38	18.2	A 19.3	18	8.6
Memphis, Tenn.	154,759	49	16.5	C 15.5	19	6.4
Milwaukee, Wis.	453,481	110	12.6	A 14.7		
Minneapolis, Minn.	383,442	95	12.9	C 14.1		
Nashville, Tenn.	119,215	59	25.8	C 21.0	16	7.0
Newark, N. J.	428,684	132	16.1	C 17.8	32	3.9
New Haven, Conn.	154,865	52	17.5	C 20.9	11	3.7
New Orleans, La.	382,273	176	24.0	A 22.4	49	6.7
New York, N. Y.	5,215,879	2,090	20.9	C 17.4	786	7.9
Omaha, Nebr.	180,264	47	13.6	C 8.1		
Philadelphia, Pa.	1,761,371	728	21.6	[3] 18.5	232	6.9
Pittsburgh, Pa.	593,303	309	27.2	C 18.7	163	14.3
Portland, Oreg.		64			10	
Providence, R. I.	263,613	103	20.4	C 19.0	28	5.5
Richmond, Va.	160,719	69	22.4	C 21.7	9	2.9
Rochester, N. Y.	264,556	68	13.4	C 15.4	16	3.2
St. Louis, Mo.	779,951	239	16.0	C 18.7	64	4.3
St. Paul, Minn.	257,699	58	11.7	C 7.1		
San Francisco, Cal.	478,530	151	16.5	C 18.1	20	2.2
Seattle, Wash.		79			21	
Spokane, Wash.		22				
Syracuse, N. Y.	161,404	57	18.4	C 20.4	10	3.2
Toledo, Ohio.	262,234	70	13.9	A 13.6	11	2.2
Washington, D. C.	401,681	149	19.3	A 19.1	40	5.2
Worcester, Mass.	173,650	87	26.1	C 19.8	23	6.9

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

lth department, State or local, can effectively prevent or control disease without nowledge of when; where, and under what conditions cases are occurring.

UNITED STATES.

A-CANTONMENT ZONES—CASES REPORTED WEEK ENDED FEB. 22.

HARLESTON SANITARY DISTRICT, S. C.

	Cases.
za:	
arleston	19

CAMP DEVENS ZONE, MASS.

:	
ncaster	3
nenburg	2
onia:	
er	2
fever:	
irley	1
ing cough:	
ncaster	2

CAMP DIX ZONE, N. J.

za:	
esterfield Township	3
:	
w Hanover Township	1

CAMP DODGE ZONE, IOWA.

oines:	
phtheria	9
phtheria carrier	1
norrhea	2
asles	1
arlet fever	11
allpox	1
philis	4

CAMP EBERTS ZONE, ARK.

n pox:	
ard	2
rhea:	
nake	1
nza:	
stin	1
bot	5
bot, R. F. D	2
gland, R. F. D	4
onia:	
ard	2
fever:	
stin, R. F. D	2

FAYETTEVILLE SANITARY DISTRICT, N. C.

	Cases.
Influenza	13
Measles	19
Mumps	2
Pneumonia	2
Tuberculosis	1

CAMP FUNSTON ZONE, KANS.

Junction City:	
Influenza	12
Mumps	1
Pneumonia	1
Scarlet fever	4
Manhattan:	
Diphtheria	1
Gonorrhea	4
Influenza	18
Mumps	5
Pneumonia	3
Scarlet fever	2

GERSTNER FIELD ZONE, LA.

Influenza	11
Smallpox	17

CAMP GORDON ZONE, GA.

Atlants:	
Chicken pox	6
Gonorrhea	5
Influenza	8
Measles	1
Mumps	2
Scarlet fever	6
Smallpox	31
Syphilis	13

GULFPORT HEALTH DISTRICT, MISS.

Diphtheria:	
Biloxi	1
Gonorrhea:	
Biloxi	1
Pascagoula	4
Influenza:	
Bay St. Louis	1
Biloxi	9
Eastside	2
Gulfport	10

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GULFPORT HEALTH DISTRICT, MISS.—continued.

Influenza—Continued.	Cases.
Handsboro	4
Lizana	8
Lyman	4
Moss Point	9
Ocean Springs	1
Pascagoula	1
Pass Christian	6
Saucier	9
Malaria:	
Biloxi	1
Gulfport	7
Meningitis:	
Bay St. Louis	1
Mumps:	
Gulfport	5
Moss Point	3
Pneumonia:	
Moss Point	1
Pass Christian	1
Wade	1
Pneumonia, broncho:	
Long Beach	1
Syphilis:	
Pascagoula	1
Tuberculosis:	
Biloxi	1
Gulfport	2
Ocean Springs	1
Whooping cough:	
Biloxi	4
Moss Point	4

CAMP HANCOCK ZONE, GA.

Augusta:	
Influenza	11
Tuberculosis	1

CAMP HUMPHREYS ZONE, VA.

Chicken pox:	
Alexandria	3
Fredericksburg	1
Influenza:	
Alexandria	19
Alexandria County	6
Fairfax County	5
Fredericksburg	104
Mumps:	
Alexandria	1
Fredericksburg	1
Pneumonia:	
Alexandria	8
Smallpox:	
Alexandria	1
Tuberculosis, pulmonary:	
Alexandria	1
Typhoid fever:	
Alexandria	1
Whooping cough:	
Fredericksburg	2

CAMP JACKSON ZONE, S. C.

Columbia:	
Diphtheria	1
Influenza	17
Meningitis, suspected	1
Mumps	1
Pneumonia	2
Scarlet fever	1

CAMP JACKSON ZONE, S. C.—continued.

Government Clinic:	C
Gonorrhea	
Syphilis	

FORT LEAVENWORTH ZONE, KANS.

Leavenworth:	
Chicken pox	
Diphtheria	
Pneumonia	
Scarlet fever	
Smallpox	
Leavenworth County:	
Diphtheria	
Erysipelas	

CAMP LEE ZONE, VA.

Hopewell:	
Chicken pox	
Diphtheria	
Petersburg:	
Influenza	
Scarlet fever	
Syphilis	
Prince George County:	
Influenza	

CAMP LEWIS ZONE, WASH.

Measles:	
Lake City	
Mumps:	
Collins	
Scarlet fever:	
Lakeview	
Smallpox:	
McKenna	

CAMP LOGAN ZONE, TEX.

Houston:	
Chicken pox	
Diphtheria	
Gonorrhea	
Measles	
Syphilis	
Trachoma	
Tuberculosis	

CAMP M'CLELLAN ZONE, ALA.

Anniston:	
Gonorrhea	
Influenza	
Syphilis	

CAMP MERRITT ZONE, N. J.

Chicken pox:	
Englewood	
Diphtheria:	
Closter	
Englewood	
Gonorrhea:	
Englewood	
Influenza:	
Closter	
Cresskill	
Dumont	
Englewood	
Measles:	
Englewood	
Mumps:	
Englewood	

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TERRITT ZONE, N. J.—continued.

	Cases.
.....	1
d.....	3
.....	2

HOALS SANITARY DISTRICT, ALA.

a.....	1
.....	5
:	
.....	11
a.....	1
.....	16
.....	25
.....	9
.....	7
a.....	3
.....	5
ver.....	1
a.....	1
.....	3
.....	1
sis.....	1

ETHORPE ZONE, GA. AND TENN.

a.....	1
.....	2

IC ACID PLANT ZONE, GA.

.....	8
.....	7
.....	9
.....	1
a.....	1
.....	1
.....	8
sis.....	1

AMP POLK ZONE, N. C.

.....	4
.....	2
ounty.....	1
.....	2
.....	100
.....	1
.....	1
nty.....	1
ost:	
.....	1
nty.....	1
gh:	
ounty.....	3
nty.....	6

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

	Cases.
Diphtheria:	
Norfolk County.....	1
Influenza:	
Norfolk.....	134
Measles:	
Norfolk.....	2
Norfolk County.....	2
Portsmouth.....	6
Pneumonia:	
Norfolk.....	2
Scarlet fever:	
Norfolk County.....	1
Smallpox:	
Norfolk.....	1

CAMP SHERIDAN ZONE, ALA.

Government Clinic:	
Chancroid.....	1
Gonorrhea.....	4
Syphilis.....	12
Montgomery:	
Chicken pox.....	1
Smallpox.....	1
Tuberculosis.....	1

CAMP SHERMAN ZONE, OHIO.

Chillicothe:	
Diphtheria.....	1
Influenza.....	4
Government Clinic:	
Gonorrhea.....	4
Syphilis.....	3

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Cerebrospinal meningitis:	
Louisville.....	3
Chicken pox:	
Jefferson County.....	1
Louisville.....	2
Diphtheria:	
Louisville.....	6
Gonorrhea:	
County Jail Clinic.....	11
Government Clinic.....	29
Influenza:	
Jefferson County.....	52
Louisville.....	242
New Albany.....	11
Measles:	
Louisville.....	1
Pneumonia:	
Louisville.....	6
Scarlet fever:	
Louisville.....	2
Syphilis:	
County Jail Clinic.....	13
Government Clinic.....	40
Trachoma:	
Louisville.....	1
Tuberculosis, pulmonary:	
Louisville.....	7

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TIDEWATER HEALTH DISTRICT, VA.

	Cases.
Hampton:	
Mumps	1
Newport News:	
Chancroid	3
Chicken pox	1
Gonorrhea	13
Influenza	1
Measles	1
Mumps	3
Pneumonia	1
Scarlet fever	1
Syphilis	2
Tuberculosis	1
Whooping cough	1
Phoebus:	
Mumps	1
Scarlet fever	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chancroid	1
Chicken pox	1
Diphtheria	1
Gonorrhea	6
Influenza	7
Measles	6
Meningitis	1
Mumps	1
Pneumonia	12
Smallpox	1
Syphilis	9
Typhoid fever	1

CAMP UPTON ZONE, N. Y.

	Cas
Brook Haven:	
Chicken pox	
Pneumonia	
Whooping cough	
Riverhead:	
Diphtheria	
Pneumonia	

CAMP WHEELER ZONE, GA.

East Macon:	
Smallpox	
Macon:	
Chicken pox	
Influenza	
Measles	
Meningitis	

WILMINGTON SANITARY DISTRICT, N. C.

East Wilmington:	
Pneumonia	
Wilmington:	
Diphtheria	
Influenza	
Mumps	
Pneumonia	
Tuberculosis	
Typhoid fever	
Winter Park:	
Whooping cough	

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports receive in the office of the Surgeon General of the United States Army f the week ended February 14, 1919. Reports from the America Expeditionary Forces are delayed in transmission, and the "curre week" for troops in the American Expeditionary Forces is not th same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes):		
All troops in United States	1,360.14	1,23
American Expeditionary Forces	1,064.66	92
Annual admission rate per 1,000 (disease only):		
All troops in United States	1,132.34	99
American Expeditionary Forces	845.02	76
Noneffective rate per 1,000 on day of report:		
All troops in United States [1]	60.15	5
American Expeditionary Forces	45.41	4
Annual death rate per 1,000 (all causes):		
All troops in United States [1]	10.92	12
American Expeditionary Forces	15.59	16
Annual death rate per 1,000 (disease only):		
All troops in United States [1]	10.09	11
American Expeditionary Forces	9.67	8

[1] Sick and death rates among troops in the United States will continue to be relatively high as t numerical strength of troops in the United States continues to decline from week to week as a result demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are r tained in service for further treatment. The continued influx of sick and wounded (properly chargeab to commands overseas) is another factor tending to increase rates in the United States and to dimini correspondingly similar rates overseas.

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Cases of special diseases reported during the week ended Feb. 14, 1919.

	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Non-effective rate per 1,000 on day of report.
.....	1	.....	.....	12	.....	.....	1	1	.....	1,620.75	58.79
.....	6	.....	.....	27	17	7	26	.....	1	3,033.33	126.29
.....	.....	.....	.....	3	.....	.....	.....	.....	.....	789.65	214.28
.....	2	.....	.....	19	.....	2	2	.....	.....	1,449.06	77.43
.....	2	.....	.....	26	6	9	.....	.....	2	730.06	72.91
.....	.....	.....	.....	29	7	2	.....	.....	.....	966.84	38.22
.....	3	.....	1	6	3	5	2	.....	.....	414.13	43.90
.....	4	.....	.....	2	.....	12	.....	.....	.....	1,292.31	62.39
.....	4	.....	.....	17	1	.....	.....	.....	.....	843.45	66.96
.....	.....	.....	.....	9	2	7	1	.....	.....	1,030.83	43.31
.....	.....	.....	.....	9	3	.....	.....	.....	.....	1,184.06	54.60
.....	4	.....	3	4	4	15	.....	.....	.....	1,631.73	61.18
.....	.....	.....	1	9	6	.....	.....	.....	.....	839.23	39.82
.....	1	.....	.....	1	.....	1	1	.....	.....	662.85	72.52
.....	1	.....	.....	10	10	.....	1	.....	5	1,503.68	80.15
.....	3	.....	.....	11	2	3	.....	.....	1	1,150.52	91.09
.....	4	.....	.....	10	.....	3	1	1	.....	1,587.49	96.02
.....	8	.....	.....	7	.....	9	.....	.....	5	1,518.08	102.61
.....	4	.....	.....	4	.....	1	.....	.....	.....	1,589.35	57.17
.....	1	.....	.....	8	.....	10	2	2	10	609.59	43.93
.....	5	.....	.....	16	.....	16	2	.....	1	1,246.60	68.95
.....	5	.....	.....	6	.....	6	7	.....	.....	747.30	65.92
.....	6	.....	1	13	3	5	2	.....	4	646.18	28.47
.....	6	.....	.....	29	.....	30	2	1	.....	1,064.47	69.25
n...	.....	.....	.....	.....	.....	1	.....	.....	.....	443.77	37.65
.....	1	.....	.....	1	.....	.....	.....	1	2	1,699.34	49.22
.....	1	.....	4	9	.....	.....	.....	.....	.....	1,043.47	84.72
.....	1	.....	.....	25	13	24	1	1	9	1,192.49	86.45
.....	19	.....	.....	11	3	2	1	.....	2	1,019.74	71.86
.....	4	.....	.....	6	.....	.....	1	1	6	641.87	38.04
.....	5	.....	.....	178	.....	34	.....	.....	1	2,319.85	102.31
.....	6	.....	.....	28	.....	18	.....	.....	1	1,603.06	106.47
.....	18	.....	.....	12	10	29	1	.....	9	1,215.99	95.53
.....	3	.....	.....	40	1	4	7	.....	.....	2,400.35	85.52
.....	.....	.....	.....	12	3	16	1	.....	1	1,987.09	78.03
De-											
.....	.....	.....	.....	8	5	.....	.....	.....	.....	756.98	28.92
art-											
.....	7	1	3	20	3	10	.....	.....	3	804.28	24.25
De-											
.....	1	.....	.....	18	5	13	.....	.....	.....	1,503.88	35.03
art-											
.....	1	.....	.....	1	.....	9	.....	.....	.....	1,111.05	31.10
art-											
.....	6	.....	.....	52	5	74	1	.....	3	1,210.20	59.47
art-											
.....	6	.....	.....	8	1	3	3	.....	1	735.23	23.61
ps...	2	.....	.....	37	.....	22	1	.....	1	878.24	38.51
rka-											
.....	18	.....	1	7	.....	93	.....	.....	3	1,323.63	144.16
ert											
.....	18	.....	1	147	12	93	3	.....	8	3,317.72	129.18
isci-											
acks											
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,346.27	19.41
Dis-											
Bar-											
.....	.....	.....	.....	8	.....	.....	.....	.....	.....	1,521.77	47.82
ar-											
.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1,227.40	43.17
ar-											
.....	.....	.....	.....	1	.....	1	.....	.....	.....	1,212.43	51.81
ll...	.....	.....	.....	1	1	.....	1	.....	.....	611.76	36.07
.....	.....	.....	.....	14	.....	.....	.....	.....	.....	1,605.88	52.94
.....	.....	.....	.....	7	7	11	1	.....	2	792.28	39.91
.....	.....	.....	.....	3	.....	.....	.....	.....	.....	852.45	41.46
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,210.95	49.31
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	840.77	15.86
.....	13	.....	.....	4	.....	25	5	.....	.....	900.59	34.93
ous											
us...	5	1	1	6	.....	12	4	.....	1	779.33	32.46
.....	205	2	16	953	133	637	81	8	82	1,132.34	60.15

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Number of deaths and annual rates per 1,000 at large camps in United States, week e
Feb. 14, 1919.

Camps.	Strength.	Deaths.		Deaths, ann rate per 1,0	
		All causes.	Disease only.	All causes	Di
Beauregard	5,358	2	2	19.41	
Bowie	5,400	1	1	9.62	
Fremont	1,778	1		29.24	
Greene	4,378				
Hancock	8,476	1	1	6.13	
Kearny	7,691				
Logan	4,897	1	1	10.61	
MacArthur	5,754	1	1	9.03	
McClellan	6,720	3	3	23.21	
Sevier	4,086	2	2	25.45	
Shelby	5,007				
Sheridan	4,743	1	1	10.96	
Wadsworth	4,771				
Wheeler	2,275	1	1	22.85	
Custer	9,095	1	1	5.71	
Devens	8,497	2	1	12.23	
Dix	17,585	2	2	5.91	
Dodge	13,767	2	1	7.56	
Eustis	2,781	1	1	18.69	
Funston	16,895	4	4	12.31	
Gordon	10,472	1	1	4.98	
Grant	18,371	5	5	14.15	
Humphreys	10,225				
Jackson	12,753	2	2	8.15	
J. E. Johnston	1,992				
Henry Knox	4,896				
Las Casas	897				
Lee	17,050				
Lewis	14,888	4	4	13.96	
Meade	12,798				
Pike	11,232	3	3	13.89	
Sherman	14,368	2	1	7.22	
Taylor	19,499	6	6	15.99	
Travis	11,336	3	3	13.76	
Upton	16,123	4	4	12.90	
Northeastern Department	5,152	1	1	10.09	
Eastern Department	32,653	2	2	3.19	
Southeastern Department	6,051	1	1	8.59	
Central Department	6,890	4	3	30.23	
Southern Department	41,552	9	8	11.26	
Western Department	12,662	1	1	4.10	
Aviation camps	38,196	7	5	9.53	
Port of embarkation:					
Hoboken	22,541	10	10	23.02	
Newport News	24,095	9	9	19.42	
All others	116,687	31	31	13.82	
Total	623,405	131	121	10.93	

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Ex tionary Fo	
	Current week.	Last week.	Current week	L w
Pneumonia	17.09	17.10	31.18	
Dysentery	0.16	0.02	0.61	
Malaria	1.33	0.09	0.11	
Venereal	79.49	59.93	28.94	
Paratyphoid	0.0	0.0	0.39	
Typhoid	1.16	0.07	3.06	
Measles	6.78	8.86	3.67	
Meningitis	0.66	0.62	2.71	
Scarlet fever	6.83	7.30	1.64	
Influenza	53.13	56.59		

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RECIPROCAL NOTIFICATION.

Minnesota.

of communicable diseases referred during January, 1919, to other State health departments by Department of Health of the State of Minnesota.

and locality of notification.	Referred to health authority of—	Why referred.
fever:		
neapolis Health Department, Hennepin ounty.	Valley, Vernon County, Wis.....	Mother and 2 children exposed to scarlet fever while visiting in Minneapolis.
	Baldwin Township, St. Croix County, Wis. (P. O. Woodville).	Farmer sick with scarlet fever 1 day after arrival from Wisconsin.
ulosis:		
ro Clinic, Rochester, lmsted County.	Chandler, Maricopa County, Ariz.; Pocatello, Bannock County, Idaho; Galesburg, Knox County, Ill.; East Moline, Rock Island County, Ill.; Oakville, Louisa County, Iowa; Ironwood, Gogebic County, Mich.; Bowling Green, route No. 7, Pike County, Mo.; Cooperstown, Griggs County, N. Dak.; Ashton, Spink County, S. Dak.; Fort Worth, Tarrant County, Tex.; Winnipeg, Manitoba, Canada.	4 advanced, 5 moderately advanced, 1 incipient, and 1 apparently arrested cases left Mayo Clinic for homes.
egama Sanatorium, ine County.	Forest City, Winnebago County, Iowa; Wishek, McIntosh County, N. Dak.	2 open cases left sanatorium for homes.
ertail County Sanatoum, Ottertail County.	Wibaux, Wibaux County, Mont.....	Fatal case removed from sanatorium to home.
rwood Sanatorium, row Wing County.	Minot, Ward County, N. Dak.....	Open case left sanatorium for home.
mas Hospital, Minneolis, Hennepin County.	St. Olaf, Clayton County, Iowa; Souris, Bottineau County, N. Dak.; Hollandale, Iowa County, Wis.	1 open case left hospital; 2 fatal cases removed from hospital to homes.
l fever:		
Paul Health Departent, Ramsay County.	Waco, McLennan County, Tex.....	Lived at Waco, Tex., 3 weeks previous to being taken sick.
	Portage, Columbia County, Wis.....	Lived at Portage, Wis., 3 weeks previous to being taken sick.

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended Feb. 22, 1919.

abama.—State totals: Typhoid fever 4, malaria 2, smallpox 18, les 36, scarlet fever 3, diphtheria 7, meningitis 3, influenza 366.

kansas.—State totals: Influenza 110, smallpox 22, meningitis 2, ria 8, diphtheria 2, chicken pox 33, measles 10, tuberculosis 8.

lifornia.—Influenza: Cases reported in State 364. Smallpox: 7, Tulare County 1, Long Beach 3, Los Angeles 3, Marysville 2, Francisco 4, Fresno County 1, Madera County 1. Typhoid : Los Angeles 2, Berkeley 2, San Francisco 1. Cerebrospinal ngitis: Eldorado County 1, San Francisco 1.

nnecticut.—Cerebrospinal meningitis: New Haven 1, Water- 1. Total influenza cases reported 340.

orida.—Reports indicate no unusual prevalence of disease. 25 cases of influenza reported.

inois.—Diphtheria 154; of which in Chicago 117, Streator 6. let fever 118; of which in Chicago 57, Quincy 7, Naperville 7, y Township (Stark County) 7, Wosung Township (Ogle County) Smallpox 55; of which in Pekin 15, Mount Sterling 5, Urbana 4,

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Elgin 4, Peoria 4. Meningitis: Chicago 5, Wilmette 1. Poliomyelitis: Chicago 1. Gonorrhea 193, syphilis 105, influenza 1,680 (of which in Chicago 498). Recrudescence of influenza noted in the following Illinois communities: Calhoun County; Hamburg precinct 18, Montrose 20; Hamilton County—Beaver Creek Township 31; Jackson County—Elk Township 19, Warren 33; Livingston County—Fayette Township 33, Woodstock 15; Monroe County—Prairie DuLong precinct 14; Peoria County—Millbrook Township 62, Duquoin 52; Richland County—Preston Township 52; Saline County—Independence Township 80; Shelby County—Herrick Township 48, Springfield 47.

Indiana.—Scarlet fever: Present in Hendricks County. Diphtheria: Fountain County 3, Floyd 2, Grant 4, White 1, Marshall 1, Posey 1, Rush 1, Howard 4, Randolph epidemic. Syphilis 21, gonorrhea 23, chancroid 1. Rabies present in Martin and Clark Counties.

Iowa.—Chancroid: Council Bluffs 1, Sioux City 1. Diphtheria: Clinton 1, Davenport 1, Des Moines 10, Dubuque 1, Iowa City 1, Ottumwa 1. Gonorrhea: Audubon 1, Boone 1, Burlington 1, Correctionville 5, Council Bluffs 10, Davenport 9, Des Moines 9, Dubuque 2, Gowrie 1, Marshalltown 1, Mason City 14, Sioux City 5, Ute 1. Measles: Northwood 1. Mumps: Northwood 2. Scarlet fever: Boone 1, Burlington 1, Des Moines 8, Goodell 1, Ottosen 1, Pella 1, Seymour 1. Smallpox: Cedar Rapids 4, Davenport 2, Des Moines 1, Dubuque 1, Farley 1, Ottumwa 1. Syphilis: Boone 1, Davenport 2, Des Moines 1, Dubuque 1, Marshalltown 1, Mason City 1, Sioux City 2. In rural districts of following counties: Diphtheria: Union 1. Scarlet fever: Davis 1, Franklin 1, Hancock 1, Marion 1, Marshall 1, Pottawattamie 3. Smallpox: Des Moines 2, Page 1. Influenza cases reported 276.

Kansas.—State totals: Typhoid fever 3, smallpox 48, diphtheria 24, scarlet fever 56, influenza 2,860.

Louisiana.—State totals: Influenza 291, meningitis 3, smallpox 77, diphtheria 12, scarlet fever 2.

Maine.—Chicken pox: Auburn 5, East Liverpool 1. Diphtheria: Friendship 1, Portland 1, Thomaston 1, Bradley 1. German measles: Portland 4. Gonorrhea: Canton 1, Peru 1, Sanford 1, Sumner 1, Turner 1, Camden 2, Bath 11, Augusta 5, Dover 2, Portland 6, Lewiston 2, Waterville 21, Ashland 1. Measles: Unity 2. Scarlet fever: Portland 5, Auburn 1, East Liverpool 1, Washburn 1. Smallpox: Frenchville 3, Guerette 18, Fort Kent 5, Katahdin Iron Works 2, Lewiston 1. Syphilis: Lewiston 3, Bangor 1, Bath 1, Portland 9, Auburn 1, Waterville 2, Augusta 2, Ashland 1. Typhoid fever: Portland 1, Foxcroft 2. State totals: Tuberculosis 15, influenza 64.

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Ohio.—Smallpox: Epidemic in Miami Valley; Dennison, Tuscarawas County, 17 cases. Scarlet fever: Lima, Allen County, 15 cases. Trachoma: Green County Children's Home 6 cases.

Oregon.—Influenza: Portland 35 cases (4 deaths), Clackamas 11 cases, Marion 6, Multnomah 1, Union 4, Wasco 1.

Vermont.—Eighteen towns report 345 cases influenza. No other outbreak or unusual prevalence.

Virginia.—Influenza reported in State 233 cases. One case smallpox at Norfolk.

Washington.—No unusual outbreaks. Smallpox: Wenatchee 1 case, Seattle 7, Puyallup 13, Tacoma 9, Pierce County 3, Yakima 14. Influenza: Seattle 36 cases.

ANTHRAX.

City Report for Week Ended Feb. 8, 1919.

During the week ended February 8, 1919, one case of anthrax and one death were reported in Hartford, Conn.

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CEREBROSPINAL MENINGITIS.

State Reports for January, 1919.

Place.	New cases reported.
Connecticut:	
Fairfield County—	
Bridgeport	1
Hartford County—	
Hartford	1
New London County—	
Griswold	1
Total	3
Illinois:	
Cook County—	
Chicago	14
Jersey County—	
Jerseyville	1
Livingston County—	
Pontiac	1
Total	16
Louisiana:	
Beauregard Parish	1
Lincoln Parish	1
Orleans Parish	2
Rapides Parish	1
Terrebonne Parish	3
Vermilion Parish	1
Washington Parish	1
Total	10
Massachusetts:	
Berkshire County—	
Pittsfield	1
Bristol County—	
Fall River	1
Essex County—	
Haverhill	1
Ipswich, town	1
Lawrence	1
Lynn	1
Manchester, town	1
Salem	1
Hampden County—	
Holyoke	1
Springfield	1

Place.	New cases reported.
Massachusetts—Continued.	
Middlesex County	1
Cambridge	1
Lowell	1
Medford	1
Waltham	1
Suffolk County—	
Boston	6
Worcester County—	
Fitchburg	1
Lancaster, town	1
Southbridge, town	1
Worcester	1
Total	26
Minnesota:	
Crow Wing County—	
Ironton	1
Ramsey County—	
St. Paul	1
Total	2
Montana:	
Beaverhead County	1
Silverbow County	1
Butte	1
Total	2
Nebraska:	
Douglas County	6
Rhode Island:	
Providence	1
West Warwick, town	1
Total	2
West Virginia:	
Clay County	1
Kanawha County	1
Marshall County	1
Ohio County	1
Wyoming County	1
Total	5

City Reports for Week Ended Feb. 8, 1919.

Place.	Cases.	Deaths.
Baltimore, Md.	3	1
Bellaire, Ohio	.....	1
Birmingham, Ala.	1	1
Boston, Mass.	.....	1
Brunswick, Ga.	1	.....
Buffalo, N. Y.	1	1
Chicago, Ill.	2	.....
Detroit, Mich.	1	.....
Fall River, Mass.	1	.....
Little Rock, Ark.	1	.....
Nashville, Tenn.	2	.....
Newburgh, N. Y.	1	.....
New York, N. Y.	10	4
Philadelphia, Pa.	1	1
Portland, Oreg.	2	1
Providence, R. I.	1	.....
Saratoga Springs, N. Y.	1	1
Wilmington, Del.	1	1

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919.

	Cases.
Muscle Shoals sanitary district, Ala.	11
Camp Sheridan zone, Ala.	1
Tidewater health district, Va.	1
Camp Travis zone, Tex.	1

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DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	9	Fort Oglethorpe zone, Ga. and Tenn	1
Camp Funston zone, Kans	1	Camp Polk zone, N. C	1
Gulfport health district, Miss	1	Portsmouth and Norfolk County health district, Va	1
Camp Jackson zone, S. C	1	Camp Sherman zone, Ohio	1
Fort Leavenworth zone, Kans	9	Camp Zachary Taylor zone, Ky. and Ind	6
Camp Lee zone, Va	1	Camp Travis zone, Tex	1
Camp Logan zone, Tex	2	Camp Upton zone, N. Y	4
Camp Merritt zone, N. J	5	Wilmington sanitary district, N. C	1
Muscle Shoals sanitary district, Ala	2		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 415.

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	2	Camp Merritt zone, N. J	1
Camp Eberts zone, Ark	1	Muscle Shoals sanitary district, Ala	17
Camp Funston zone, Kans	4	Picric Acid Plant zone, Ga	8
Camp Gordon zone, Ga	5	Camp Sheridan zone, Ala	4
Gulfport health district, Miss	5	Camp Sherman zone, Ohio	4
Camp Jackson zone, S. C	6	Camp Zachary Taylor zone, Ky. and Ind	40
Camp Logan zone, Tex	5	Tidewater health district, Va	13
Camp McClellan zone, Ala	1	Camp Travis zone, Tex	6

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919.

	Cases.		Cases.
Charleston sanitary district, S. C	19	Camp Merritt zone, N. J	34
Camp Dix zone, N. J	3	Muscle Shoals sanitary district, Ala	25
Camp Eberts zone, Ark	12	Picric Acid Plant zone, Ga	7
Fayetteville sanitary district, N. C	13	Camp Polk zone, N. C	102
Camp Funston zone, Kans	30	Portsmouth and Norfolk County health district, Va	134
Gerstner Field zone, La	11	Camp Sherman zone, Ohio	4
Camp Gordon zone, Ga	8	Camp Zachary Taylor zone, Ky. and Ind	305
Gulfport health district, Miss	64	Tidewater health district, Va	1
Camp Hancock zone, Ga	11	Camp Travis zone, Tex	7
Camp Humphreys zone, Va	134	Camp Wheeler zone, Ga	1
Camp Jackson zone, S. C	17	Wilmington sanitary district, N. C	19
Camp Lee zone, Va	66		
Camp McClellan zone, Ala	2		

MALARIA.

Louisiana Report for January, 1919.

Place.	New cases reported.	Place.	New cases reported.
Louisiana:		Louisiana—Continued.	
East Baton Rouge Parish	1	Vermilion Parish	1
Rapides Parish	15	Washington Parish	1
St. Landry Parish	2		
		Total	20

City Reports for Week Ended Feb. 8, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Alexandria, La	3	.....	New York, N. Y	1	.....
Baton Rouge, La	1	1	Palestine, Tex	2	.....
Bloomfield, N. J	1	.....	Stockton, Cal	1	.....
Little Rock, Ark	1	.....	Tuscaloosa, Ala	2	.....
Newark, N. J	1	.....			

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MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919.

	Cases.		Cases.
Camp Devens zone, Mass	5	Fort Oglethorpe zone, Ga. and Tenn	2
Camp Dix zone, N. J	1	Picric Acid Plant zone, Ga	9
Camp Dodge zone, Iowa	1	Camp Polk zone, N. C	1
Fayetteville sanitary district, N. C	19	Portsmouth and Norfolk County health district, Va	10
Camp Gordon zone, Ga	1	Camp Zachary Taylor zone, Ky. and Ind	1
Camp Lewis zone, Wash	2	Tidewater health district, Va	1
Camp Logan zone, Tex	7	Camp Travis zone, Tex	6
Camp Merritt zone, N. J	1	Camp Wheeler zone, Ga	2
Muscle Shoals sanitary district, Ala	17		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 415.

PELLAGRA.

State Reports for January, 1919.

During the month of January, 1919, cases of pellagra were reported as follows: Orleans Parish, La., 1; Boston, Mass., 1.

City Reports for Week Ended Feb. 8, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Austin, Tex	1	1	Memphis, Tenn		1
Birmingham, Ala	1		Nashville, Tenn		1
Charleston, S. C		1	Pine Bluff, Ark	1	
Fort Worth, Tex	1	1	Troy, N. Y		4
Houston, Tex		1			

PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919.

	Cases.		Cases.
Camp Devens zone, Mass	2	Muscle Shoals sanitary district, Ala	3
Camp Eberts zone, Ark	2	Picric Acid Plant zone, Ga	1
Fayetteville sanitary district, N. C	2	Portsmouth and Norfolk County health district, Va	2
Camp Funston zone, Kans	4	Camp Zachary Taylor zone, Ky. and Ind	6
Gulfport health district, Miss	3	Tidewater health district, Va	1
Camp Humphreys zone, Va	8	Camp Travis zone, Tex	12
Camp Jackson zone, S. C	2	Camp Upton zone, N. Y	3
Fort Leavenworth zone, Kans	2	Wilmington sanitary district, N. C	4
Camp Merritt zone, N. J	4		

City Reports for Week Ended Feb. 8, 1919.

Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
Akron, Ohio	1			
Ann Arbor, Mich	2	1		
Anniston, Ala	2			
Atlanta, Ga	2	8		
Baltimore, Md	35	36		
Baton Rouge, La			20	5
Bayonne, N. J	1			
Belleville, N. J	1			
Beverley, Mass	1	2		
Binghamton, N. Y	1			
Boston, Mass	77	23		
Bristol, Conn	1	1		
Brockton, Mass	1			
Brookline, Mass	1	1		
Brunswick, Ga	5	1		

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PNEUMONIA—Continued.

City Reports for Week Ended Feb. 8, 1919—Continued.

Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
, N. Y.	18	16		
Mont	1			
dge, Mass.	1	3		
, N. J.	18			
rardeau, Mo.	5	2		
ton, W. Va.	8	2		
, Mass.	2	2		
, Ill.			363	92
id, Ohio	186	46		
n, R. I.			2	2
e, Ill.	6			
, Ohio	2	2		
Mich	29	43	40	61
Minn.	3	1		
npton, Mass.	2			
ange, N. J.			4	1
N. Y.	4	2		
ood, N. J.	4			
ver, Mass.	4	1		
orth, Tex.	11	5		
N. Y.	1			
Rapids, Mich	8	1		
ich, Conn.	3	2		
sack, N. J.			3	4
n, N. J.	1			
d, Conn.	2	4		
ll. Mass.	10	5		
d Park, Mich	7	2		
n, Wash.	1			
dence, Mo.			2	
wn, N. Y.			5	2
ity, N. J.			18	
Mo.	2			
oo, Mich	3	2		
City, Kans.	8			
City, Mo.	34	19		
N. J.	2	2		
anna, N. Y.	6			
od, Ohio	1	1		
e, Mass.	2	1		
Nebr.	1			
ock, Ark.	10	1		
eles, Cal.	6	2		
lass.	4	2		
Mass.	1			
ster, Conn.	2			
ster, N. H.	1	1		
Ind.	2	2		
, Mass.	1			
Mass.	1			
Conn.	1			
r, N. J.	5	1		
own, W. Va.	1			
wn, N. J.	2	1		
ernon, N. Y.	4	3		
N. J.	66	20		
dford, Mass.	1			
ittain, Conn.	1	1		
gh, N. Y.	2	4		
ndon, Conn.	2	1		
t, Ky.	3	3		
, Mass.	2	1		
rk, N. Y.		290	665	501
Va.	2	3		
Tonawanda, N. Y.	1			
k, Conn.	2	5		
d, Ohio	1			
N. J.	1	1		
g, N. Y.	3	1		
e, Tex.	4	1		
burg, W. Va.	5	2		
N. J.	3			
phia, Pa.	275	73		
uff, Ark.	3			
urgh, N. Y.	1			
, Mich.	6	1		
ester, N. Y.	10	3		

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PNEUMONIA—Continued.

City Reports for Week Ended Feb. 8, 1818—Continued.

Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
Portsmouth, N. H.	1			
Poughkeepsie, N. Y.	4	1		
Quincy, Ill.	2			
Richmond, Va.	1	4		
Riverside, Cal.	3			
Rochester, N. Y.	11	3		
Sacramento, Cal.	1	3	1	
Salem, Mass.	1			
San Antonio, Tex.	8	4		
Sandusky, Ohio.			1	
Saratoga Springs, N. Y.	3	4		
Sault Ste. Marie, Mich.	1			
Schenectady, N. Y.	1			
Somerville, Mass.	5	1		
Springfield, Mass.	14	3		
Taunton, Mass.	1	2		
Toledo, Ohio.	1	4		
Trenton, N. J.	5	6		
Watertown, Mass.	1	1		
Westfield, Mass.	3			
Winston-Salem, N. C.	7	3		

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for January, 1919.

Place.	New cases reported.	Place.	New cases reported.
Connecticut:		Massachusetts—Continued.	
New Haven County—		Hampden County—	
New Haven	1	Springfield	
Illinois:		Worcester County—	
Cook County—		Athol, town	
Blue Island	1	Suffolk County—	
Chicago	8	Boston	
Saline County—		Total	
Eldorado	1	Michigan:	
Total	10	Calhoun County—	
Massachusetts:		Marshall	
Essex County—			
Gloucester	1		

City Reports for Week Ended Feb. 8, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Boston, Mass.	1		Milwaukee, Wis.	1	
Bridgeport, Conn.	1		Port Huron, Mich.	1	
Columbus, Ohio.	1		St. Louis, Mo.	1	

RABIES IN ANIMALS.

City Reports for Week Ended Feb. 8, 1919.

During the week ended February 8, 1919, 1 case of rabies in animals was reported in Kansas City, Mo., and 11 cases were reported in San Antonio, Tex.

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SCARLET FEVER.

s Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919.

	Cases.
s zone, Mass	1
zone, Iowa	11
zone, Ark	2
n zone, Kans	6
n zone, Ga	6
n zone, S. C	1
worth zone, Kans	1
ne, Va	1
Camp Lewis zone, Wash	1
Camp Merritt zone, N. J	2
Camp Polk zone, N. C	1
Portsmouth and Norfolk County health district, Va	1
Camp Zachary Taylor zone, Ky. and Ind	2
Tidewater health district, Va	2

Diphtheria, measles, scarlet fever, and tuberculosis, page ——.

SMALLPOX.

s Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919.

	Cases.
zone, Iowa	1
d zone, La	17
zone, Ga	31
reys zone, Va	1
orth zone, Kans	4
one, Wash	3
ant zone, Ga	1
Camp Polk zone, N. C	1
Portsmouth and Norfolk County health district, Va	1
Camp Sheridan zone, Ala	1
Camp Travis zone, Tex	1
Camp Wheeler zone, Ga	1

State Reports for January, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
ty	1			1		
nty—						
ing	1					1
unty—						
Township	1				1	
n	1				1	
nty—						
Township	1		1			
ounty—						
ngton Heights	1					1
ty—						
dac	1				1	
nty—						
on	1			1		
nty—						
l Township	3				3	
l Lodge	1				1	
ounty—						
ood Township	1					1
ner	1				1	
ood	4				4	
verse County—						
rse City	6				6	
unty—						
ette Township	1				1	
unty—						
Township	2				2	
g	11				11	
o County—						
nazoo Township	3				3	
nazoo	15				13	2
nty—						
l Rapids	1					1
County—						
n Township	1				1	
ridge Township	1				1	
ra Township	1			1		
Township	1				1	
n	1					1

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SMALLPOX—Continued.

State Reports for January, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vacc hist obta unc
Michigan—Continued.						
Mason County—						
Sherman Township	1				1	
Ludington	1				1	
Menominee County—						
Menominee	3				3	
Midland County—						
Ingersoll Township	3				3	
Midland Township	1				1	
Mount Haley Township	6				6	
Monroe County—						
Monroe	6				6	
Oakland County—						
Holly Township	1				1	
Pontiac	1			1		
Ogemaw County—						
Edwards Township	2					
West Branch Township	1				1	
Saginaw County—						
Blumfield Township	2				1	
Washtenaw County—						
Bridgewater Township	1					
Wayne County—						
Detroit	11					
Total	101		1	3	75	
Minnesota:						
Anoka County—						
Columbia Heights	1			1		
Blue Earth County—						
Ceresco Township	1				1	
Chippewa County—						
Clara City	1				1	
Clearwater County—						
Popple Township	3				3	
Crow Wing County—						
Rabbit Lake Township	1				1	
Hennepin County—						
Minneapolis	33			7	26	
Kanabec County—						
Whited Township	2				2	
Nobles County—						
Adrian	1			1		
Norman County—						
Henrium	12				12	
Flom Township	63				63	
Olmsted County—						
Rochester	1				1	
Ottertail County—						
Richville	4				4	
Polk County—						
Queen Township	1			1		
Sletten Township	1				1	
Rice County—						
Faribault	1				1	
Cannon City Township	1				1	
Rock County—						
Luverne	1			1		
Magnolia	1				1	
Denver Township	1					
Rose Dell Township	1				1	
St. Louis County—						
Duluth	5				5	
Great Scott Township	1				1	
Washington County—						
Newport	1				1	
Lincoln Township	1				1	
Wright County—						
Cokato	1				1	
Total	140			11	128	

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SMALLPOX—Continued.

State Reports for January, 1919.

ace.	Cases.	Deaths.
unty—		
.....	1	.....
nty—		
Sterling.....	1	.....
County—		
.....	1	.....
.....	1	.....
ounty—		
.....	1	.....
ton.....	1	.....
y—		
.....	21	.....
unty—		
.....	1	.....
nty—		
o.....	2	.....
nty—		
.....	2	.....
Township.....	3	.....
ty—		
n Township..	1	.....
y—		
nlee.....	4	.....
.....	31	.....
ounty—		
eville.....	2	.....
ty—		
wnship.....	2	.....
ty—		
.....	1	.....
ounty—		
lle.....	1	.....
.....	2	.....
nty—		
Township.....	1	.....
.....	8	.....
wnship.....	2	.....
nty—		
.....	5	.....
unty—		
.....	1	.....
ck.....	2	.....
nty—		
gton.....	1	.....
.....	16	.....
County—		
n Township..	1	.....
.....	2	.....
ity.....	16	.....
nty—		
ille.....	10	.....
y—		
Mines.....	3	.....
.....	35	.....
County—		
an l.....	12	.....
y—		
.....	1	.....
nty—		
Louis.....	5	.....
ounty—		
.....	2	.....
nty—		
.....	24	.....
County—		
.....	1	.....
.....	227	.....
h.....	2	.....
.....	4	.....
Parish.....	3	.....

Place.	Cases.	Deaths.
Louisiana—Continued:		
Calcasieu Parish.....	69	.....
East Feliciana Parish	4	.....
Evangeline Parish.....	7	.....
Iberia Parish.....	1	.....
Jefferson Davis Parish....	3	.....
Natchitoches Parish.....	2	.....
Orleans Parish.....	4	.....
Ouachita Parish.....	2	.....
Rapides Parish.....	2	.....
Richland Parish.....	5	.....
St. Charles Parish.....	2	.....
St. Landry Parish.....	3	.....
Vermilion Parish.....	8	.....
Vernon Parish.....	2	.....
Total.....	123	.....
Montana:		
Beaverhead County.....	2	.....
Big Horn County.....	5	.....
Cascade County—		
Great Falls.....	7	.....
Fergus County.....	4	.....
Flathead County.....	4	.....
Kalispell.....	1	.....
Silverbow County—		
Butte.....	3	.....
Yellowstone County—		
Billings.....	3	.....
Total.....	29	.....
Nebraska:		
Box Butte County.....	3	.....
Cheyenne County.....	5	.....
Dakota County.....	1	.....
Douglas County.....	67	.....
Fillmore County.....	2	.....
Franklin County.....	4	.....
Furnas County.....	19	.....
Hall County.....	1	.....
Hitchcock County.....	1	.....
Johnson County.....	3	.....
Lancaster County.....	48	.....
Merrick County.....	3	.....
Nance County.....	1	.....
Phelps County.....	1	.....
Seward County.....	3	.....
Total.....	162	.....
West Virginia:		
Braxton County.....	1	.....
Fayette County.....	6	.....
Jefferson County.....	2	.....
Kanawha County.....	13	.....
Lincoln County.....	4	.....
Logan County.....	1	.....
McDowell County.....	1	.....
Marion County.....	3	.....
Mercer County.....	3	.....
Mingo County.....	43	.....
Preston County.....	1	.....
Raleigh County.....	3	.....
Randolph County.....	4	.....
Roane County.....	8	.....
Taylor County.....	1	.....
Wetzel County.....	5	.....
Wood County.....	1	.....
Wyoming County.....	45	.....
Total.....	145	.....

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[redacted]					
Los Angeles, Cal.	1	.....	Tacoma, Wash.	5	...
Ludington, Mich.	4	.....	Washington, D. C.	7	...
Madison, Wis.	1	.....	Winston-Salem, N. C.	13	...
	6	.....			

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Feb. 22, 1919

	Cases.		
Camp Dodge Zone, Iowa	4	Muscle Shoals sanitary district, Ala.	...
Camp Gordon zone, Ga.	13	Picric Acid Plant zone, Ga.	...
Gulfport health district, Miss.	1	Camp Sheridan zone, Ala.	...
Camp Jackson zone, S. C.	17	Camp Sherman zone, Ohio.	...
Camp Lee zone, Va.	3	Camp Zachary Taylor zone, Ky. and Ind.	...
Camp Logan zone, Tex.	1	Tidewater health district, Va.	...
Camp McClellan zone, Ala.	1	Camp Travis zone, Tex.	...

TETANUS.

City Reports for Week Ended Feb. 8, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	D
Cleveland, Ohio	1	.....	Mobile, Ala.	.....	
Denver, Colo.	.....	1	Newark, N. J.	1	...

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State Reports for Ja

Place.	New cases reported.
Arizona:	
Cochise County	1
Connecticut:	
New Haven County—	
Derby	1
New Haven	2
Fairfield County—	
Shelton	1
Westport	1
Hartford County—	
Hartford	1
Total	6
Illinois:	
Champaign County—	
Urbana	1
Cook County—	
Chicago	9
Lake County—	
Lake Forest	1
North Chicago	6
Madison County—	
Edwardsville	1
Highland	1
Montgomery County—	
Waggoner	1
Rock Island County—	
East Moline	3
Saline County—	
Galatia	1
Tazewell County—	
Pekin	1
Vermilion County—	
Danville Township	1
Williamson County—	
Cambria	1
Franklin County—	
Six Mile Township	4
Zeigler	3
Total	34
Louisiana:	
Avoyelles Parish	3
Beauregard Parish	4
East Baton Rouge Parish	1
East Feliciana Parish	2
Grant Parish	1
Iberville Parish	3
Jackson Parish	1
Natchitoches Parish	1

Lou	
Rapides Parish	1
Red River Parish	1
St. Martin Parish	1
Total	23
Massachusetts:	
Bristol County—	
Fall River	2
New Bedford	4
North Attleboro, town	1
Essex County—	
Gloucester	2
Haverhill	2
Lawrence	12
Lynn	2
Marblehead, town	1
Saugus, town	1
Middlesex County—	
Cambridge	1
Framingham, town	1
Natick, town	1
Newton	1
Somerville	5
Norfolk County—	3
Cohasset, town	
Quincy	2
Suffolk County—	1
Boston	
Revere	8
Worcester County—	1
Brookfield, town	
Leominster	4
Uxbridge, town	1
Worcester	1
	1
Total	57
Michigan:	
Eaton County—	
Delta Township	1
Genesee County—	
Flint	1
Gratiot County—	
North Star Township	1
Houghton County—	
Stanton Township	3
Ingham County—	
Meridan Township	1
Lansing	2
Kalamazoo County—	
Kalamazoo	2

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Rosewood	5
Ramsey County—	
St. Paul	4
St. Louis County—	
Duluth	2
Hibbing	1
Stearns County—	
St. Cloud	2
Swift County—	
Appleton	1
Winona County—	
Winona	1
Total	22

Marion County	
Monongalia County	
Monroe County	
Preston County	
Raleigh County	
Randolph County	
Upshur County	
Webster County	
Wetzel County	
Total	

City Reports for Week Ended Feb. 8, 1919.

Place.	Cases.	Deaths.
Akron, Ohio	1	
Alexandria, La		1
Asheville, N. C	1	
Baltimore, Md	6	1
Baton Rouge, La	1	
Birmingham, Ala		1
Boston, Mass	1	
Buffalo, N. Y	1	
Charleston, W. Va		1
Charlotte, N. C	2	
Chicago, Ill	2	
Cincinnati, Ohio	2	
Covington, Ky	2	
Denver, Colo	2	
Detroit, Mich	2	
Fall River, Mass	1	
Fort Worth, Tex	2	
Hammond, Ind		1
Independence, Mo	6	
Ironton, Ohio	4	
Kansas City, Mo	1	4
Lackawanna, N. Y	1	
Lawrence, Mass	5	
Lima, Ohio	2	
Little Rock, Ark	1	
Los Angeles, Cal	4	

Place.	Cases.	De
Lynne, Mass	1	
Medford, Mass	1	
Memphis, Tenn	2	
Milwaukee, Wis	1	
Moline, Ill	2	
Nashua, N. H	1	
New Haven, Conn	1	
New Orleans, La	2	
New York, N. Y	7	
Norfolk, Va	1	
Northampton, Mass	1	
North Yakima, Wash	5	
Norwood, Ohio	1	
Passaic, N. J	1	
Philadelphia, Pa	5	
Portland, Me	1	
Providence, R. I		
Richmond, Va	1	
Saginaw, Mich	1	
St. Louis, Mo	1	
Salt Lake City, Utah	1	
Toledo, Ohio	2	
Waltham, Mass	1	
Washington, D. C	3	
Watertown, Mass	1	
Zanesville, Ohio	1	

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Anderson, Ind	24,230	9								3
Ann Arbor, Mich	15,041	10					1			
Anniston, Ala	14,326								1	
Ansonia, Conn	16,954	1								
Appleton, Wis	18,005	5								
Arlington, Mass	13,073	1								
Asbury Park, N. J	14,629	2								
Asheville, N. C	25,656	24	1						2	9
Ashtabula, Ohio	22,008	4								
Atlanta, Ga	196,144	85	2				3			4
Atlantic City, N. J	59,515	9			1		1		1	
Attleboro, Mass	19,776	6					1			
Auburn, N. Y	37,823	14					2			
Austin, Tex	35,612	11	1						3	3
Baltimore, Md	594,637		35	4	8		72	1	23	35
Bangor, Me	26,958						4			
Barre, Vt	12,401	2								1
Baton Rouge, La	17,544	6	1		2		1			
Battle Creek, Mich	30,159		9		1		1			
Bayonne, N. J	72,204		12		1				6	
Beacon, N. Y	11,674	3								
Bedford, Ind	10,613	4							1	
Bellaire, Ohio	14,575	4								
Belleville, N. J	12,797						2			
Bellingham, Wash	34,362				1					
Beloit, Wis	18,547	6								1
Benton Harbor, Mich	11,009	2					2		1	
Berkeley, Cal	60,427	12							1	2
Berlin, N. H	13,892	4								
Beverly, Mass	22,128	6							1	
Biddeford, Me	17,760	6								2
Billings, Mont	15,123	6					4		1	
Binghamton, N. Y	54,864	12			1		2		4	
Birmingham, Ala	189,716	63	3	1	13	1	2		21	6
Bloomfield, N. J	19,013	3	1	1						1
Bloomington, Ind	11,661								1	3
Boston, Mass	767,813	301	87	7	5		29	2	52	23
Brazil, Ind	10,472	6								
Bridgeport, Conn	124,724	46	11	2	5				5	2
Bristol, Conn	16,318	4	3				5		2	
Brockton, Mass	69,152	18	1				4		2	1
Brookline, Mass	33,526	11	1		1		4		1	
Brunswick, Ga	10,984	6			6					
Buffalo, N. Y	475,781	201	81	5	25		19	1	31	15
Burlington, Iowa	25,144	3					4			
Burlington, Vt	21,802	7			17					
Butte, Mont	44,057		1		1		4			1
Cairo, Ill	15,995	3								
Cambridge, Mass	114,293	50	6		1		2		3	1 5

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Danville, [illegible]	32,969	14	1	.....	.....	.....	.....	.....	11
Danville, Va	20,183	5	.....	.....	.....	.....	.....	.....	.....
Dayton, Ohio	128,[illegible]39	44	2	.....	.....	.....	2	.....	4
Decatur, Ill	41,[illegible]83	10	2	1	.....	.....	.....	.....	.....
Dedham, Mass	10,618	4	.....	.....	.....	.....	.....	.....	.....
Denver, Colo	268,439	97	10	.....	2	.....	13	.....	.....
Des Moines, Iowa	104,052	.....	5	.....	.....	.....	2	.....	.....
Detroit, Mich	619,648	294	85	7	7	.....	56	1	52
Dover, N. H	13,276	7	.....	.....	.....	.....	.....	.....	1
Dubuque, Iowa	40,096	.....	2	.....	.....	.....	.....	.....	.....
Duluth, Minn	97,077	23	8	1	3	.....	1	.....	4
Durham, N. C	26,160	7	.....	.....	.....	.....	.....	.....	1
East Chicago, Ind	30,286	9	.....	.....	.....	.....	.....	.....	.....
Easthampton, Mass	10,656	.....	.....	.....	.....	.....	2	.....	.....
East Orange, N. J	43,761	9	.....	.....	.....	.....	4	.....	4
East Providence, R. I	18,485	.....	.....	.....	.....	.....	2	.....	.....
Elgin, Ill	28,562	7	2	.....	.....	.....	.....	.....	.....
Elizabeth, N. J	88,830	.....	4	.....	1	.....	3	.....	2
Elmira, N. Y	38,272	19	.....	.....	3	.....	.....	.....	5
Englewood, N. J	12,603	3	.....	.....	.....	.....	.....	.....	.....
Eureka, Cal	15,142	4	.....	.....	.....	.....	.....	.....	.....
Evanston, Ill	29,304	10	.....	.....	1	.....	1	.....	.....
Everett, Mass	40,160	10	2	2	.....	.....	4	.....	2
Fall River, Mass	129,828	45	9	2	23	2	1	.....	8
Fargo, N. Dak	17,872	3	.....	.....	.....	.....	4	.....	.....
Findlay, Ohio	14,858	8	.....	.....	4	.....	.....	.....	.....
Fitchburg, Mass	42,119	.....	4	.....	.....	.....	.....	.....	1
Fond du Lac, Wis	21,486	5	.....	.....	.....	.....	.....	.....	.....
Fort Scott, Kans	10,564	3	1	.....	.....	.....	.....	.....	.....
Fort Wayne, Ind	78,014	16	.....	.....	.....	.....	.....	.....	.....
Fort Worth, Tex	109,597	22	.....	.....	.....	.....	.....	.....	.....
Fostoria, Ohio	10,959	5	.....	.....	.....	.....	1	.....	.....
Framingham, Mass	14,149	4	.....	.....	.....	.....	.....	.....	.....
Frederick, Md	11,225	9	.....	.....	.....	.....	.....	.....	.....
Fremont, Nebr	10,080	4	.....	.....	.....	.....	.....	.....	.....
Fresno, Cal	36,314	10	.....	.....	.....	.....	.....	.....	.....
Galesburg, Ill	24,629	7	.....	.....	40	.....	.....	.....	.....
Galveston, Tex	42,650	11	.....	.....	.....	.....	.....	.....	.....
Geneva, N. Y	13,915	3	.....	.....	.....	.....	.....	.....	.....
Gloversville, N. Y	22,314	.....	1	.....	.....	.....	.....	.....	.....
Grand Rapids, Mich	132,861	31	1	.....	2	.....	10	.....	6
Great Falls, Mont	[1] 13,948	12	1	.....	5	.....	1	.....	1
Green Bay, Wis	30,017	8	.....	.....	.....	.....	.....	.....	.....
Greenfield, Mass	12,251	5	.....	.....	1	.....	1	.....	1
Greensboro, N. C	20,171	2	.....	.....	.....	.....	.....	.....	.....

[1] Population Apr. 15, 1910.

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[illegible], Wash.	22,058		1		1		9			
Norwalk, Conn.	27,332						2			
Norwich, Conn.	21,923	1	3				1			
Oakland, Cal.	206,405	63	4	1			2		6	
Oak Park, Ill.	27,816	8	1		14				2	
Oklahoma City, Okla.	97,588	19			8					
Olean, N. Y.	16,927	7								
Omaha, Nebr.	177,777	33	3		10		1			
Orange, Conn.	14,333	4	1				1			
Orange, N. J.	33,636	15	5		1		2		1	
Ossining, N. Y.	14,064	12	1						2	
Palestine, Tex.	12,075	5							1	
Parkersburg, W. Va.	21,059	13	1		1					
Pasadena, Cal.	49,620	13	1						1	
Passaic, N. J.	71,478	10	2		3				3	
Pawtucket, R. I.	60,666	16	4							
Peekskill, N. Y.	19,034	9								
Pekin, Ill.	10,973						1			
Peoria, Ill.	72,184	20					2			
Philadelphia, Pa.	1,735,514	750	83	9	12		60	1	140	
Pine Bluff, Ark.	17,777		2				1		1	
Plainfield, N. J.	24,330	6								
Plattsburg, N. Y.	13,111	5							1	
Pontiac, Mich.	18,006		9		2		1			
Port Chester, N. Y.	16,727	8			1				2	
Port Huron, Mich.	[1] 18,863	7	1						1	
Portland, Me.	64,720	23	1				1			
Portland, Oreg.	308,339	62	4	1	6		8		6	
Portsmouth, N. H.	11,730								1	
Portsmouth, Va.	40,693		3		1				1	
Poughkeepsie, N. Y.	30,786	7	1		1				1	
Providence, R. I.	259,895	98	20	3			5			
Quincy, Ill.	36,832					1	5	1		
Quincy, Mass.	39,022	12	1				5		2	
Racine, Wis.	47,465	11							2	
Railway, N. J.	10,361	3								
Raleigh, N. C.	20,274	14							1	
Redlands, Cal.	14,573	4					1			
Reno, Nev.	15,514	6								
Richmond, Va.	158,702	67	2	1	3		1		6	
Riverside, Cal.	20,496	11							3	
Roanoke, Va.	46,282	17	1		12					
Rochester, N. Y.	264,714	81	6	2	2		11		8	
Rockford Ill.	56,739	11	4						3	
Rock Island, Ill.	29,452								1	
Rocky Mount, N. C.	12,673	4							1	
Rome, N. Y.	24,259		2		3		1		3	

[1] Population Apr. 15, 1910.

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al	3									
hio	2									
	1									
ara, Cal	1									
Cal	1									
rings, N. Y	1									
ss	1									
e Marie, Mich	1									
ly, N. Y	10									
ash	36									
, Iowa	5									
ls, S. Dak	1									
e, Mass	8									
nd, Ind	7									
ige, Mass	1									
urg, S. C	2									
Wash	157,656						3			
ld, Ill	62,623	12	2	1			1			
eld, Mass	108,668	42	2		1		6		5	2
eld, Mo	41,169	7								1
eld, Ohio	52,296	18			17				1	1
nville, Ohio	28,259	11					1		1	
n, Cal	36,209	17								
r, Ill	14,313	6	1							
r, Wis	47,167	4								
e, N. Y	158,559	44	7				16		4	2
, Wash	117,446		1				1			
n, Mass	36,610	20			8				1	3
Iaute, Ind	67,361	22								2
, Ohio	202,010	57	15				16		2	1
, Kans	49,538	14	1				1			
n, N. J	113,974	53	12						6	3
N. Y	78,094	38	2	1			4		5	1
oosa, Ala	10,824		2						1	
N. Y	89,272	30	5		10		1		6	2
o, Cal	13,803	3								
uver, Wash	13,805						2		1	
am, Mass	31,011	8	1		1		2		1	2
ington, D. C	369,282	150	48	3	2		15		36	9
rbury, Conn	89,201	3	4	1	4		3		2	2
rtown, Mass	15,188	9					1		2	
rtown, N. Y	30,404	4		2						
san, Wis	19,666	4								
tfield, Mass	18,769	7	4				1			
t Hoboken, N. J	44,386	14	1				6			1
t New York, N. J	19,613	4	3	1			1		1	1
t Orange, N. J	13,964	2	1				1			1
eling, W. Va	43,657	14							1	
ite Plains, N. Y	23,331								1	1
chita, Kans	73,597	32					1			
lmington, Del	95,369	41	2	1	1		1		1	2
nchester, Mass	10,812	4								3
nona, Minn	[1] 18,583	7								
nston-Salem, N. C	33,136	17	3	1						
nthrop, Mass	13,105				2		1		1	
oburn, Mass	16,076	4					2			
onkers, N. Y	103,066		4							
oungstown, Ohio	112,282	54	3		2		3		2	4
anesville, Ohio	31,320	5			16		6		2	2
					1					1

[1] Population Apr. 15, 1910.

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FOREIGN.

DENMARK.

Influenza—September–December, 1918.

Statistics published by the administration of public hygiene Denmark show the prevalence of influenza as follows: For t entire country, during the month of September, 1918, 10,057 cas of which 2,617 cases occurred at Copenhagen, and during the mon of October, 1918, 113,651 cases for the entire country, of whi 43,813 occurred at Copenhagen. (Population of Denmark, 3,018,00 population of Copenhagen, 539,000.)

For the month of November and the first week of Decembe 1918, the weekly bulletin of demographic and medical statistics the city of Copenhagen shows as follows: Copenhagen, week end November 9, 5,676 cases; week ended November 16, 2,924 case week ended November 23, 1,932 cases; week ended November 3 1,835 cases; week ended December 7, 2,746 cases.

GREECE.

Further Relative to Influenza—Saloniki.[1]

Influenza has been further reported at Saloniki as follows: D cember 8 to 28, 1918, 416 fatal cases; December 29, 1918, to Jan ary 4, 1919, 158 fatal cases.

HAWAII.

Influenza—Honolulu—December, 1918–January, 1919.

Influenza in mild form was reported present during Decembe 1918, in the Ewa district of the county of Honolulu, Island of Oah From January 1 to 15, 1919, 543 cases of influenza were reporte in the county of Honolulu. Of these, 489 occurred in the Ewa di trict, 33 in the city of Honolulu, and 5 on vessels. During the we ended January 25, 1919, 206 cases were reported in the city a county of Honolulu, which includes the entire Island of Oahu. these 206 cases, 203 originated on the island and 3 occurred arriving vessels.

MEXICO.

Influenza—Vera Cruz.

During the three weeks ended February 2, 1919, 96 fatal cases influenza were notified at Vera Cruz, Mexico.

[1] Public Health Reports, Jan. 17, 1919, p. 97.

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NEWFOUNDLAND.

Influenza.

luenza was reported present in the Island of Newfoundland, ber 18, 1918, with 77 cases in hospital at St. Johns and an esti- d number of about 400 cases present at outports. Influenza nued to be reported during the months of November and De- er, 1918. During the week ended January 10, 1919, 115 cases reported in hospital at St. Johns. (Population of St. Johns. lly estimated, 35,000.)

RUSSIA.

Influenza—Archangel, City and Government.[1]

ring the period from November 15 to December 1, 1918, 10 ases of influenza were reported in the city of Archangel, and Archangel government, 2,621 cases.

SERBIA.

Typhus Fever—Belgrade.

hus fever was reported present, February 5, 1919, at Belgrade, , with 62 cases. The disease developed among Serbian soldiers ng from the south and among Czech prisoners.

ERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Feb. 28, 1919.[2]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
r:				
n	To Oct. 5	17	11	
en	Oct. 13-19	1		On a barge.
nwerder				1 case in October, 1918, on a barge in canal.
na:				
in-China—				
aigon	Nov. 18-Dec. 22	57	33	
ne Islands:				
inces				Dec. 29, 1918-Jan. 4, 1919: Cases, 88; deaths, 73.
Batangas	Dec. 29-Jan. 4	3	2	
Bulacan	do	12	10	
Cavite	do	10	10	
Ilocos Sur	do	11	10	
Laguna	do	6	3	
Pangasinan	do	45	37	
Tayabas	do	1	1	
saw	Sept. 29-Oct. 5	2		
ograd	Aug. 22-Sept. 11	536		In civil and military hospitals.
nia—				
Ekaterinoslav	Sept. 1-20	7	6	
Odessa	do	25		Sept. 1-20, 1918: 11 cases on s. s. Helena.

[1] Public Health Reports, Dec. 27, 1918, p. 2355.
[2] From medical officers of the Public Health Service, American consuls, and other sources.

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Musgrave Harbor	do			Present.
St. Georges	do	11		
Philippine Islands:				
Manila	Dec. 29–Jan. 4	1	1	Varioloid, 1.

TYPHUS FEVER.

Austria-Hungary:				
Hungary	Sept. 2–8	2		
Germany:				
Breslau	Sept. 29–Oct. 19	12	8	
Königsberg	do	3	1	
Mostolten	do	7	2	District of Allenstein.
Greece:				
Saloniki	Dec. 8–21		6	
Do	Dec. 29–Jan. 4		25	
Mexico:				
Mexico City	Jan. 12–25	66		
Poland				Sept. 15–28, 1918: Cases, deaths, 24.
Lodz	Sept. 15–28	9	2	
Warsaw	do	70	10	
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoner
Spain:				
Madrid	Dec. 1–31		1	

Reports Received from Dec. 28, 1918, to Feb. 21, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17–30	4	5	
India:				
Bombay	Aug. 18–Nov. 9	26	15	
Calcutta	Sept. 29–Dec. 14		152	Report for Nov. 23, 1918, miss
Madras	Oct. 5–Dec. 14	141	95	
Rangoon	do	29	27	

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Capiz	Dec. 22–28	44	39	
Cavite	Oct. 27–Nov. 2	7	5	
Do	Nov. 17–Dec. 21	38	28	
Cebu	Dec. 15–21	163	75	
Ilocos Sur	Dec. 8–28	41	20	
Iloilo	Oct. 27–Nov. 2	17	8	
Do	Nov. 17–Dec. 21	9	6	
Laguna	Oct. 27–Dec. 28	70	51	
Mindoro	Nov. 24–30	18	11	
Misamis	Oct. 27–Nov. 2	4	5	
Do	Nov. 17–Dec. 28	6	5	
Oriental Negros	Nov. 2–9	75	48	
Do	Nov. 17–Dec. 7	20	8	
Pampanga	Nov. 24–Dec. 14	6	6	
Pangasinan	Nov. 2–9	4	4	
Do	Nov. 17–Dec. 28	236	192	
Rizal	Oct. 27–Nov. 2	428	313	
Do	Nov. 24–30	3	1	
Samar	Dec. 15–21	16	5	
Sorsogon	Nov. 17–23	8	1	
Tayabas	Nov. 2–9	8	4	
Do	Nov. 17–Dec. 28	7	4	
Union	Nov. 2–Dec. 28	54	25	
Zamboanga	Dec. 8–28	18	14	
Russia:		27	19	
Petrograd	To July 16	3,388	1,054	
Do	July 17–Aug. 21	2,943	1,455	In civil hospitals. In military hospitals, July 5–Aug. 21, 1918: Cases, 884; deaths, 783.

PLAGUE.

China:				
Amoy				Present.
Chungking	Dec. 1–7			Do.
Hongkong	Oct. 26–Dec. 8	1	1	
Do	Nov. 9–Dec. 28	1	2	
Nanking	Nov. 2–9			Always prevalent.
Ceylon:				
Colombo	Oct. 27–Nov. 2	1	1	
Ecuador:				
Guayaquil	Nov. 1–Dec. 31	15	3	
Taura	Dec. 16–31	1	1	
Egypt				Jan. 1–Nov. 21, 1918: Cases, 357; deaths, 153.

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Coleys Point	Dec. 14–20	1	.....	
Curling	Jan. 26–31	3	.....	
Kings Cove	Jan. 18–24	1	.....	
Musgrave Harbor	Dec. 7–13	4	.....	
Do	Jan. 11–17	6	.....	
Paradise	Dec. 7–13	60	.....	Placentia Bay.
St. Jacques	Jan. 18–24	2	.....	
Philippine Islands:				
Manila	Nov. 2–9	2	2	
Do	Dec. 29–Jan. 4	1	.....	Varioloid 1.
Portugal:				
Lisbon	Nov. 16–Dec. 28	843	.....	
Portuguese East Africa:				
Lourenco Marques	.....	.....	.....	July 1–Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1–3	4	.....	
Spain:				
Cadiz	Oct. 1–31	.....	3	
Madrid	Sept. 1–Oct. 31	.....	153	
Seville	Nov. 1–30	.....	2	
Valencia	Nov. 10–Dec. 21	40	9	
Straits Settlements:				
Penang	Oct. 6–12	1	.....	
Union of South Africa:				
Cape Town	Aug. 1–30	1	.....	
Johannesburg	Aug. 1–Oct. 31	12	.....	Nov. 1–30, 1918: Cases, 4.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1–30	.....	1	
Brazil:				
Ceara	Sept. 14–21	1	.....	
China:				
Antung	Dec. 2–15	2	.....	
Do	Jan. 6–12	.....	1	
Colombia:				
Barranquilla	Nov. 8–Dec. 28	.....	3	
Do	Jan. 19–25	1	.....	
Egypt:				
Alexandria	Oct. 14–Dec. 31	85	36	

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physical properties and their mechanical behavior toward man because of chemical toxicity or bacterial content.

The protection of workers against such dusts can sometimes be attained by the substitution of wet for dry processes and sometimes by accomplishing sorting or abrading operations by the use of mechanical devices in inclosed spaces. In certain extreme cases, as in the sand-blasting of large castings, the wearing of special respirators or helmets is the only practicable safeguard. In most dust-generating processes, however, and notably in the operation of grinding and buffing wheels, the removal of the dust at its point of production by a powerful system of local exhaust ventilation is the most effective safeguard.

Many State laws deal with this problem, but until recently the provisions they contain have been very general in their nature. Seven years ago Hoffman (1911) reviewed the state of existing legislation as follows:

"Ten States make special mention of dusts from emery wheels or other metallic substances. Except in five States (Illinois, Michigan, New Jersey, Ohio, and Wisconsin) the laws require merely that injurious dusts are to be removed 'as far as practicable' or 'as far as the nature of the business permits', or 'when inhaled to an injurious extent'; and the entire decision as to the kind of protective device necessary is left to the discretion of the inspection officials. In the five States mentioned the laws are more specific in that they carefully

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define the character of the appliances to be installed and place t
duty of installation directly upon the employer. In Michigan a
in Illinois under the 1905 act, which was not repealed by the law
1909, however, the inspector may not enforce the provisions of t
law unless complaint has been made by some person, and in Illin
the complaint must be accompanied by $1. Twenty-eight Sta
and the District of Columbia have no specific legal enactment
the protection of workers from injurious dusts, although several
these have general provisions with reference to ventilation."

Since 1911 several States have adopted, usually through industr
commissions or industrial boards, more specific and definite standa
for dust removal. So far as we are aware those regulations
depend on the establishment of a minimum static suction head
the exhaust ducts connected with grinding, polishing, and buffi
wheels.

Thus, according to the Wisconsin Code—

"On all grinding, buffing, and polishing wheels, the suction in t
connection to the hood must be sufficient to displace a column
water in a U tube, 5 inches.

"The test for suction with the U tube must be a static test a
must be made in the following manner: A hole ⅛ inch in diame
must be made in the suction pipe approximately 12 inches from
connection to the hood. The rubber hose attached to the U tu
must be placed over the ⅛-inch hole and the test made under th
conditions. When the water in the U tube stands at 0, the 5-in
displacement is secured when one column of water rises 2½ inc
above 0 and the other column of water falls 2½ inches below 0."

The New Jersey code requires that—

"Sufficient suction head shall be maintained in each branch p
within 15 inches of the hood to displace 2 inches of water in a U-shap
tube. Pressure to be taken by pressing tube attachment over sm
opening through pipe, commonly called static method. Tests
be made with all branches open and unobstructed."

The New York code reads:

"Sufficient static suction shall be maintained in every branch p
within 1 foot of the hood to produce a difference of level of at leas
inches of water between the two sides of a U-shaped tube. T
shall be made placing one end of a rubber tube over a small h
made in pipe, the other end of tube being connected to one side
U-shaped water gauge. Such test shall be made with all bran
pipes open and unobstructed."

The head, as thus measured, includes both velocity and friction
components, and it is obvious that it bears no necessary relation
the velocity of the exhaust at the face of the wheel itself. The St
des, to which reference has been made, do, it is true, specify t

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consin standard of 5 inches indicates that the evidence upon which even this imperfect standard has been based must be somewhat inconclusive.

A more valuable sort of standard from the sanitary standpoint would be one based on actual velocity of exhaust at the point of dust production, instead of suction head in the duct below. Such a standard was suggested by the British departmental committee on the lead hazard in the pottery industry (Great Britain, 1910) in the form of the very mild recommendation that a speed of 100 linear feet per minute should be maintained at the point of dust production.

The only standard that can be altogether satisfactory to the sanitarian, however, is one that deals directly with the actual condition of the air inhaled by the worker. It is well that certain definite suction heads and air velocities should be maintained, but what we really want to know is whether the dust has actually been removed. Mechanical standards are convenient and easy of application, but whenever special conditions interfere with such correlation it is the actual state of the atmosphere that is of primary importance. What we must ultimately rely upon in the future is a standard that rests upon the number or weight of dust particles actually contained in the air breathed by the worker.

So far as we are aware only two efforts have so far been made to set definite standards of this kind for industrial dusts, both of them in connection with the air of mines.

The earliest of these attempts was made by the miners' phthisis prevention committee of South Africa (1916), and reference to their

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report (p. 21) shows that they were fully cognizant of the difficul and the novelty of the problem. To quote:

"69. The committee, being desirous of taking immediate steps cope with the disease, was confronted with the difficulty that standard of purity with regard to dust existed to which to wo In order to assist in arriving at such a standard, tests of the amou and the character of the dust in the street air of Johannesburg w taken as affording some basis of comparison. At the same time was soon discovered by experiment that it was practically impossi to remove by dust-allaying devices all the dust from either und ground or surface air. The question arose as to what weight cubic meter could be considered permissible, and as this was m or less a matter for conjecture the committee decided, for the ti being, to adopt the tentative standard of 5 milligrams of dust to cubic meter of air. This figure was at the time supposed to repres the average amount of silicious dust under 70 microns diame present in the air of a Johannesburg street, but on account of great difference in character and the proportion of 'injurious' d between mine and street dust, the direct comparison of weights m be misleading.

"The amount of 'injurious' dust which air can carry without be dangerous has not yet been determined, and, indeed, can only ascertained by experience."

The only other attempt to set a standard for the dust content air was made by Higgins, Lanza, Laney, and Rice (1917) in th very complete study of the mines in the Joplin district (Missou They say:

"The most reasonable standard then appears to be one based the quantity of dust that will remain in suspension after the b known methods have been put into use for its abatement.

"It has been demonstrated in the sheet ground mines of the Jop district that by the proper use of water and the regulation of cert details of mining the quantity of dust in the mine air can be k below 1 milligram per 100 liters of air; so it seems reasonable to 1 milligram as a standard at least for the Joplin district."

No similar studies have, so far as we are aware, been made connection with the dust produced in grinding or polishing industri

Methods Adopted for Studying Suction Head in Exhaust Pipes and Dust Cont of Air.

Before attempting to fix standards of air dustiness we desired study the relation in actual practice between suction head in exhau pipes and dust content of the air of the workroom. Our method procedure was to vary the exhaust pressure at the grinding whe measure this pressure in terms of inches of water in a U tube, and th

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find the corresponding dust content of the air in the near vicinity of the machine. It is quite evident that under given conditions there must exist a more or less definite exhaust pressure, above which it is impossible to obtain further marked reductions in the dust content of the atmosphere. This quantity of dust may for the want of a better name be called the residual dust content of the air. This dust count (and weight) would probably be a fair standard and would agree closely with the ideas of Lanza and Higgins when they say:

"The most reasonable standard, then, appears to be one based on the quantity of dust that will remain in suspension after the best known methods have been put into use for its abatement."

At the very outset of our work it was agreed that the count of the number of dust particles in each cubic foot of air would not by itself give a complete record of the harmfulness of the dust. It was decided that the following information was essential: Number of particles, distribution by size, weight of dust per cubic foot of air, and the proportion of the dust that was organic or inorganic in nature.

The choice of a sampling method was greatly facilitated by the final report of "The Committee on Standard Methods for the Examination of Air" (1917).

Referring to the Palmer "water spray method," the committee concludes: "This method is a new one and may no doubt be altered and improved in the future. In its present form, however, it has given entirely satisfactory results as tested in the laboratory of three members of the committee. We believe it to be the most promising method now available and recommend that it be used in ordinary sanitary investigations."

In an exhaustive report by Palmer, Coleman, and Ward (1916) we find (p. 1063) under the summary of results with the three sampling methods studies (Graham-Rogers plate, sugar filter, and water-spray methods):

The water-spray apparatus is superior to the sugar filter in—

(*a*) Making possible the collection of larger air samples in the same period of time, with the attendant greater accuracy in the count.

(*b*) Providing a dust sample whose content can be estimated by turbidity and weight as well as by counting.

(*c*) Being more portable.

(*d*) Simplifying and reducing the errors of technique in the substitution of distilled water as the filtering medium for solid soluble material, such as sugar or resorcin, whose dust content is a more variable factor.

And, lastly, Ward (1916), speaking of this same method, says (p. 171):

"It is firmly believed that the new method not only furnishes the simplest and most practical means of determining the dust content in

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the air in industrial establishments but that it also gives promise of the most constant results by which the required legal standards may be obtained as a prerequisite to the enforcement of desirable conditions of wholesome air purity in factories, workshops, and mines."

In view of this experience and these recommendations the Palmer water-spray method was chosen by us as the best method to employ.

The technique in the collection and counting of the dust particles followed closely that formulated by the committee on standard methods for the examination of air. In general it was as follows:

The Palmer apparatus was placed in position, 40 cubic centimeters of distilled water was added to the bulb of the machine, and the machine was started. It has been shown by Palmer et al. (1916) (p. 1061) that in a given atmosphere the dust count varies to some degree inversely with the size of the sample, as a result of errors in small samples due to the presence of dust in the water or on the slide. For this reason our samples were practically all of either 250 or 300 cubic feet of air. After each three or four minutes of operation water was added to the bulb to make up that lost by evaporation. At the end of the sampling time the water from the Palmer bulb was drained into an Erlenmeyer flask graduated to 100 cubic centimeters. The bulb was then rinsed with small additional portions of water and these were added to the flask. The total sample was then made up to 100 cubic centimeters. Suitable controls were made with the distilled water used in sampling, which controls received the same laboratory treatment as the dust samples.

When the sample arrived at the laboratory it was thoroughly agitated and two 1-cubic centimeter portions were removed to Sedgwick-Rafter counting cells. These cells were scrupulously cleaned and in most cases were examined empty under the microscope to detect the presence of any adventitious dust. After allowing the cell contents to settle, five counts were made on each cell, one at each corner and one in the center. The lens combination used in the microscope was No. 3 objective, a No. 3 eyepiece with an inserted eyepiece micrometer and a microscope tube length of 166 millimeters. With this magnification, which was approximately 84 diameters, the smallest square ruled on the eyepiece micrometer was found to be 0.02 millimeter on a side, which is the dimension of a 'standard unit." In recording the dust count, the particles were grouped by sizes and recorded in counts of the number of particles in each of the following classes.

1. Large masses about 100 standard units (0.04 square millimeter.)
2. About 25 standard units (0.01 square millimeter).
3. About 1 standard unit (0.0004 square millimeter).
4. About ¼ standard unit (0.0001 square millimeter).
5. Dust too fine to count. Presence indicated by a plus (+) sign.

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sample did not contain 100 cubic centimeters and in these the proper figure was used.) It now remains to divide this figure by the total number of cubic feet of air in the sample. Summarizing, we have:

Particles per cubic foot of air = Count per one-fourth field × 400,000 ÷ cubic feet of air in sample.

The U tube used for determining the exhaust pressure was an ordinary piece of glass tubing, bent in the form of a U, attached to one end of which was a piece of rubber tubing. The U tube was filled with water, so colored as to facilitate reading.

The method of determining the U-tube reading was very simple. It consisted in applying to a hole ⅛ inch in diameter, drilled in the straight portion of the branch exhaust pipe between the machine and the main lateral, the loose end of the rubber tube to which the U tube was fastened. The difference in water level on both sides of the U was then read from a scale fastened to the tube.

Velocity measurements were also made at each machine with an anemometer, so as to determine if possible any correlation between U-tube reading and velocity of air flow.

The exhaust in the principal workroom where these studies were conducted was through a rectangular opening below the wheel. The branch exhaust pipe had a bend just below this opening, and in order to secure a fairly even distribution of velocity over the area where the

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wheels, and 6 belts. Four types of exhaust piping are in use. Fo
polishing magazine tubes a 2 by 6 inch overhead exhaust is used. Fo
polishing large rifle parts a standard down-draft exhaust hood is pro
vided having a 10 by 6 inch throat opening. For the small leathe
wheel equipment no hoods are used, the exhaust pipe terminating in
3-inch opening beneath the wheel. For the emery belts a speci
form of adjustable hood and pipe is employed.

The emery wheels are made by gluing the emery powder (No. 90
generally used) to the wheel by means of a thin application of glu
When an emery wheel is to be used for the first time, after bein
freshly coated with emery, it is necessary that all of the loose an
large or coarse particles of emery be removed. This is accomplishe
by means of a piece of metal, or in some cases by the use of a paddl
shaped piece of wood coated with carborundum dust, held firml
against the wheel. This is called truing the wheel. During th
polishing process oil must frequently be applied by holding firml
against the wheel an oil-soaked roll of cloth. In the process of po
ishing gun parts as here performed there are, therefore, in the mai
three sources of dust:

1. Truing the wheel.
2. Oiling the wheel.
3. Polishing the gun part.

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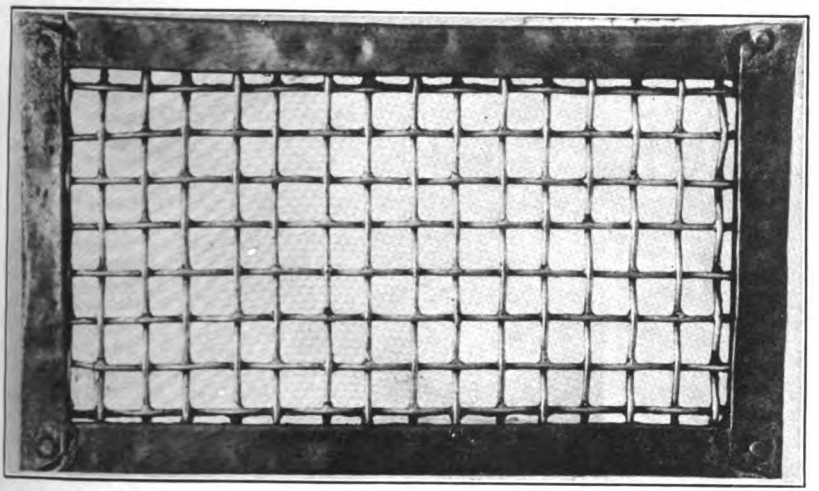
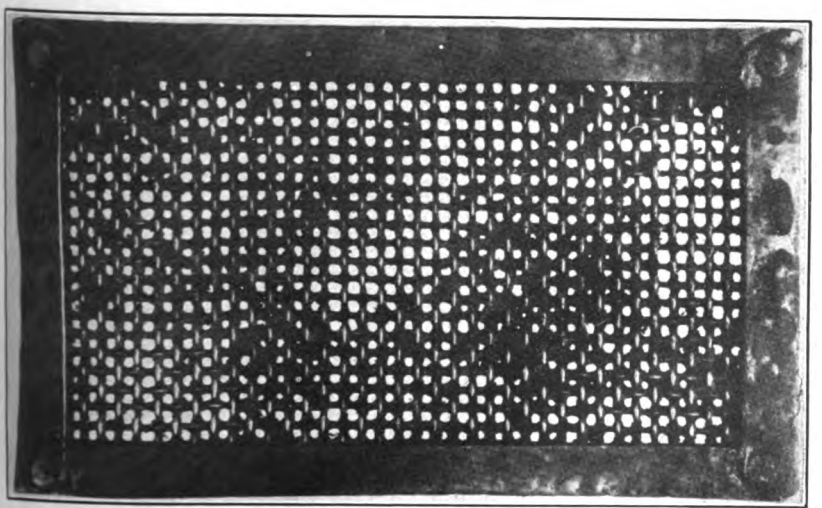


A



B

Fig. 1.

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According to nature and origin the dust may be grouped as follows:

Organic:	Inorganic:
Wood.	Emery.
Cloth.	Metal.
Glue.	Carborundum.
Leather or felt.	

Two rows of machines were selected as being best suited to the purposes of our experiments, one row along the center aisle at the east end of the room and the other row along the north window side of the east end. The operation performed on the window row of machines was that of polishing the magazine tubes, and on the center row that of polishing the trigger guards of the rifles. These two particular rows were selected because they presented the most continuous flow of work and also the most continuous of the grinding operations. The Palmer apparatus was placed midway between two adjoining polishing machines, a position as near a machine as could be obtained without interfering with the work of the operator. The standardization of experimental conditions was exceedingly difficult to obtain, owing to the fact that the work in this shop was of an emergency war nature, and interference with the operators was not to be considered.

Table 1 shows in detail the results of our experimental studies in this shop. (See also fig. 2.)

A second series of similar observations was made in another grinding room of factory A, designated as the heavy polishing shop. This room is rectangular in shape, 249 feet long by 39 feet wide, and 13 feet from floor to ceiling. Ventilation is secured by windows only, of which there are 100.

In this shop the larger parts of the rifles are polished, the method of polishing being exactly the same as that employed, and the abrasive wheels being duplicates of those used, on the two rows of machines studied in the cornering and light polishing shop.

Two rows of machines were selected in this room, four sampling positions being chosen on one row and three on the other. At these seven stations samples were taken coincident with high and low U-tube readings.

In Table 2 are given the results of the experimental observations and analyses in the heavy polishing shop. (See fig. 3.)

It will be noted that the observations were made in pairs. Each pair includes, first, one observation under the normal conditions of operation of the exhaust system, and, second, an observation at the same point after a brief interval (5 to 10 minutes), during which the suction head had been reduced by opening doors in the main exhaust duct between the sampling point and the exhaust fan.

In the miners phthisis prevention committee's report it is stated that "Dr. McCrae found that the dust extracted from the lungs of

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deceased miners, by a process of acid oxidation, consisted of extremely minute particles. On measurement, it was ascertained that none of the particles were larger than 12 microns in diameter, and

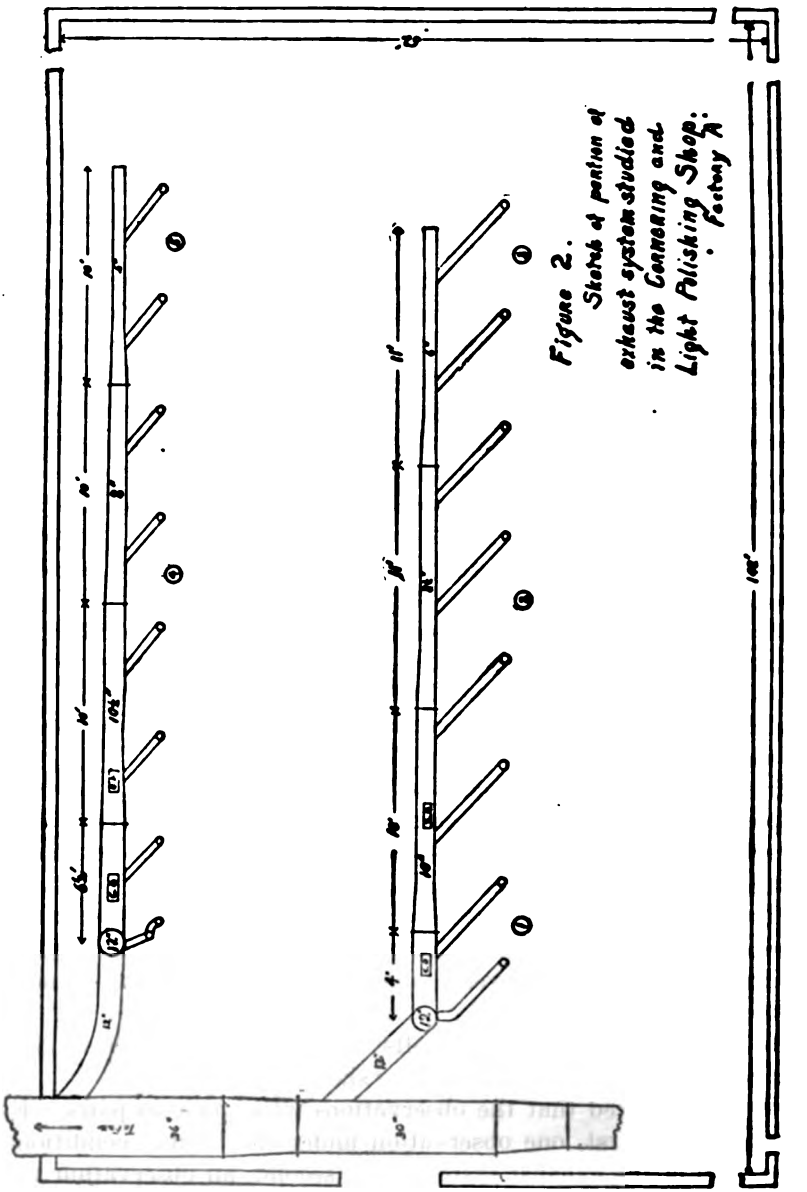

Figure 2.
Sketch of portion of exhaust system studied in the Cornering and Light Polishing Shop, Factory K.

that the great majority of them were less than 1 or 2 microns, or very much smaller in size than a red blood corpuscle.

"These investigations were sufficient to indicate that it is the very fine particles which are the most important factor in the causation of the dis-

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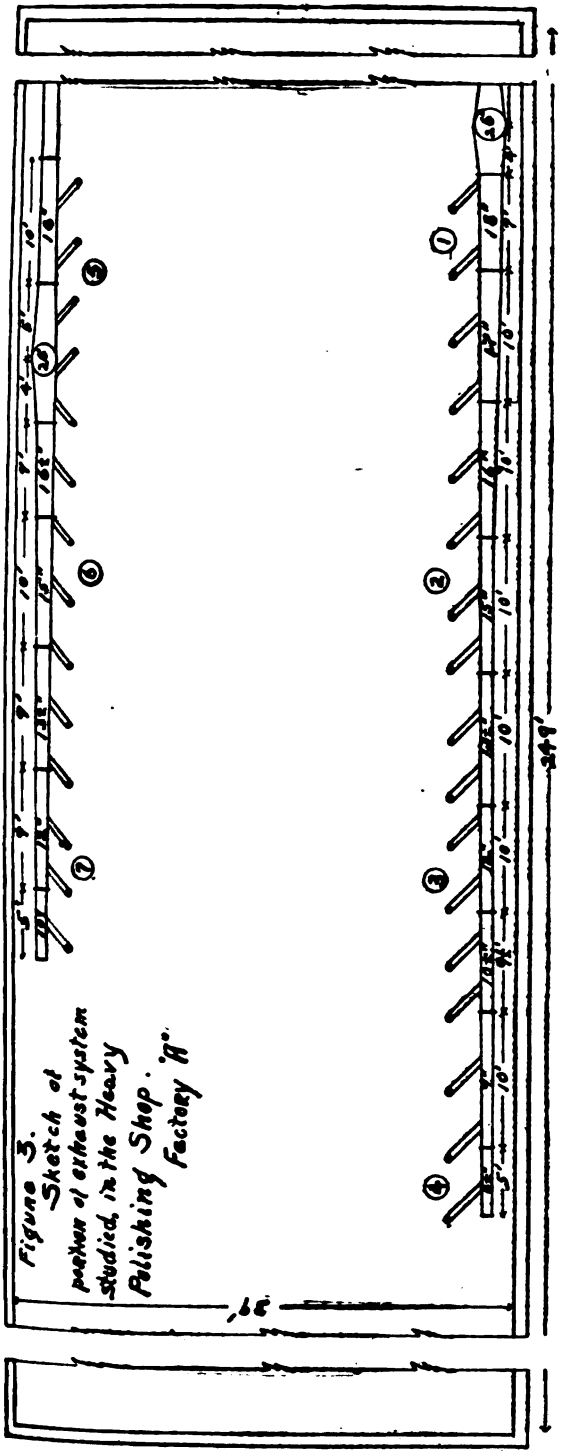

ease. It is, therefore, very probable that particles over 12 microns in diameter are relatively unimportant, and that only those lying under the limit of 12 microns need be taken into account."

In the light of these conclusions it is evident that the particles which in our study are of greatest interest as disease-producing ones are those classified as ¼ of a standard unit and less in area. One-fourth of a standard unit is equal to 0.0001 square millimeters, or 0.01 × 0.01 millimeters. These particles are, therefore, 10 microns and under in diameter down to, perhaps, 1 or 2 microns, a size which is just countable. It is with these particles that our conclusions will mainly deal.

In Table 3 have been grouped the dust counts of ¼ standard unit particles and the weight of the inorganic dust per cubic foot of air sampled, with the corresponding U-tube readings.

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TABLE 1.—*Dust analyses—Cornering and light polishing shop, factory A.*

Sample No.	Date.	Sampling position.	U-tube reading (inches).	Exhaust velocity (ft/min.).	Average number of particles per cubic foot of air.			Total number particles per cubic foot.	Standard units per cubic foot of air.	Milligrams of solids per cubic foot of air.			Per cent inorganic material.
					25 standard units.	1 standard unit.	¼ standard unit.			Total.	Organic.	Inorganic.	
6210	June 21, 1918												
6211		2	3.75	1,470	133	8,940	215,000	224,000	66,400	0.0295	0.0119	0.0176	59.6
6212			.50	432	800	9,310	535,000	545,000	163,000	.0292	.0102	.0190	65.0
6240	June 24, 1918												
6241		3	3.50	1,697	133	3,460	22,400	26,000	10,500	.0105	.0054	.0051	48.5
6242			.25	460	133	12,900	1,773,000	1,790,000	460,000	.0605	.0145	.0460	76.0
6243		1	2.75	1,705	133	2,130	45,200	47,500	15,000	.0098	.0034	.0064	65.3
6244			1.25	1,173		5,320	304,000	309,500	227,000	.0275	.0058	.0217	78.8
6250	June 25, 1918												
6251		5	4.63	4,905		2,420	22,200	24,600	8,000	.0085	.0033	.0052	61.2
6252			.25	1,300		3,270	48,300	51,500	15,400	.0156	.0030	.0126	80.7
6253		4	3.56	4,480		3,840	241,000	245,000	195,000	.0104	.0052	.0052	50.0
6254			.50	1,340	145	4,830	745,000	750,000	195,000	.0193	.0045	.0148	75.6
6260	June 26, 1918												
6261		1	2.62	1,705		3,560	720,000	723,500	183,000	.0193	.0052	.0141	73.1
6262			1.25	1,174		6,250	1,000,000	1,006,000	256,000	.0422	.0134	.0288	68.2
6263		3	3.25	1,682	440	3,270	44,500	48,000	25,400	.0148	.0078	.0070	47.3
6264			.25	461	145	5,550	654,000	660,000	176,000	.0293	.0122	.0171	58.4
6270	June 27, 1918												
6271		2	3.00	1,626	145	5,060	252,000	258,000	72,700	.0422	.0052	.0370	87.7
6272			.25	418	3,700	25,400	790,000	820,000	319,000	.3620	.0000	.3620	100.0

Rate of sampling, 4.5 cubic feet per minute. Volume of sample, between 275 and 301 cubic feet.

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TABLE 2.—*Dust analyses—Heavy polishing shop.*

Sample No.	Date.	Sampling position.	U-tube reading (inches).	Average number of particles per cubic foot of air.			Total number of particles per cubic foot.	Standard units per cubic foot of air.	Milligrams of solids per cubic foot of air.			Per cent inorganic material.
				25 standard units.	1 standard unit.	¼ standard unit.			Total.	Organic.	Inorganic.	
7160	July 16, 1918											
7161		1	3.50	160	11,050	854,000	865,210	227,000	0.0672	0.0065	0.0607	90.4
7162			1.50		16,000	1,418,000	1,434,000	363,000	.0382	.0061	.0321	86.4
7163		2	3.00		2,320	70,500	72,820	19,400	.0153	.0030	.0123	80.4
7164			.02		2,080	42,900	44,980	12,150	.0106	.0012	.0094	88.6
7165		3	2.85		1,920	56,800	58,720	15,500	.0130	.0012	.0118	90.7
7166			.62		56,000	2,980,000	3,036,000	768,000	.2120	.0004	.2116	99.7
7170	July 17, 1918											
7171		4	2.62	160	1,760	87,000	88,920	26,900	.0553	.0045	.0508	91.8
7177			.50		3,040	191,000	196,040	50,400	.0102	.0035	.0077	75.5
7180	July 18, 1918											
7181		6	3.25		1,600	130,700	132,300	33,000	.0099	.0017	.0082	82.8
7182			.50		5,600	165,000	170,600	45,400	.0270	.0042	.0228	84.5
7191	July 19, 1918	5	3.50		31,000	180,500	211,500	74,800	.0240	.0062	.0178	74.3
7192			0.00		16,960	1,075,000	1,091,960	285,000	.0748	.0060	.0688	92.0
7193		7	2.38	480	26,750	52,200	79,430	54,400	.0254			
7194			.13	800	13,430	638,000	652,250	191,500	.0802	.0102	.0700	87.2

Rate of sampling, 4.5 cubic feet per minute. Volume of all samples, 250 cubic feet.

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TABLE 3.—*Comparative tabulation of number of small dust particles and weight of dust in air with high and low suction heads.*

Sample No.	U-tube reading (inches).	Number of ½ standard unit particles per cubic foot of air.	Milligrams of solids per cubic foot.	Sample No.	U-tube reading (inches).	Number of ½ standard unit particles per cubic foot of air.	Milligrams of solids per cubic foot.
6211	3.75	215,000	0.0295	6212	0.50	535,000	0.0[illegible]
6241	3.50	22,400	.0105	6242	.25	1,773,000	.0[illegible]
6243	2.75	45,200	.0098	6244	1.25	894,000	.0[illegible]
6251[1]	4.63	22,200	.0085	6252[1]	.25	48,300	.0[illegible]
6253	3.56	241,000	.0104	6254	.50	745,000	.0[illegible]
6261	2.62	720,000	.0193	6262	1.25	1,000,000	.0[illegible]
6263	3.25	44,500	.0148	6264	.25	654,000	.0[illegible]
6271	3.00	252,000	.0422	6272	.25	790,000	.[illegible]
7161	3.50	854,000	.0672	7162	1.50	1,418,000	.0[illegible]
7163[2]	3.00	70,000	.0153	7164[2]	.63	42,900	.0[illegible]
7165	2.88	56,800	.0130	7166	.63	2,980,000	.[illegible]
7171	2.63	87,000	.0533	7172	.50	191,000	.0[illegible]
7181	3.25	139,700	.0099	7182	.50	165,000	.0[illegible]
7191	3.50	189,500	.0240	7192	.....	1,075,000	.0[illegible]
7193	2.38	52,200	.0254	7194	.13	638,000	.0[illegible]

[1] Operator worked only 10 minutes. [2] Very light operation.

Figure 4 is a graphical representation of the various dust counts and U-tube readings taken from Table 3.

An examination of Table 3 and figure 4 shows that in general, and other conditions being equal, a reduction in suction head is quickly followed by an increase in air dustiness.

The dust counts with low exhaust pressure are relatively high, varying, with two exceptions, from 165,000 to 2,980,000 particles per cubic foot of air. These two exceptions, samples 6252 and 7164, may be justly eliminated. The dust count on these, being less than 50,000 particles at low exhaust pressure, indicates that, relatively speaking, little dust was being created in the operation. It will be noted that while sampling 6252 the operator only worked 10 minutes of the sampling time, and in the case of sample 7164 the operation was very light. The average of all the dust counts is 853,000 particles, and with the two samples 6252 and 7164 omitted, the average becomes 990,000 or practically 1,000,000 particles per cubic foot of air.

With the application of the normal, higher exhaust pressure the dust content is considerably lower, an average of all the samples being 200,000 particles. In this case there are again two samples, 6261 and 7161, which greatly increase the value of the average. Disregarding these two values the general average becomes 120,000 particles per cubic foot.

The total weight of total solids per cubic foot of air is 0.069 milligrams with the low exhaust pressure (averaging 0.56 inch) and 0.023 milligrams with the high exhaust pressure (averaging 3.21 inches).

An examination of the corresponding observations in the two halves of Table 3 (the normal conditions being on the left, the reduced exhaust velocities on the right) shows more clearly than the general averages just what was happening. In one case (samples 7163

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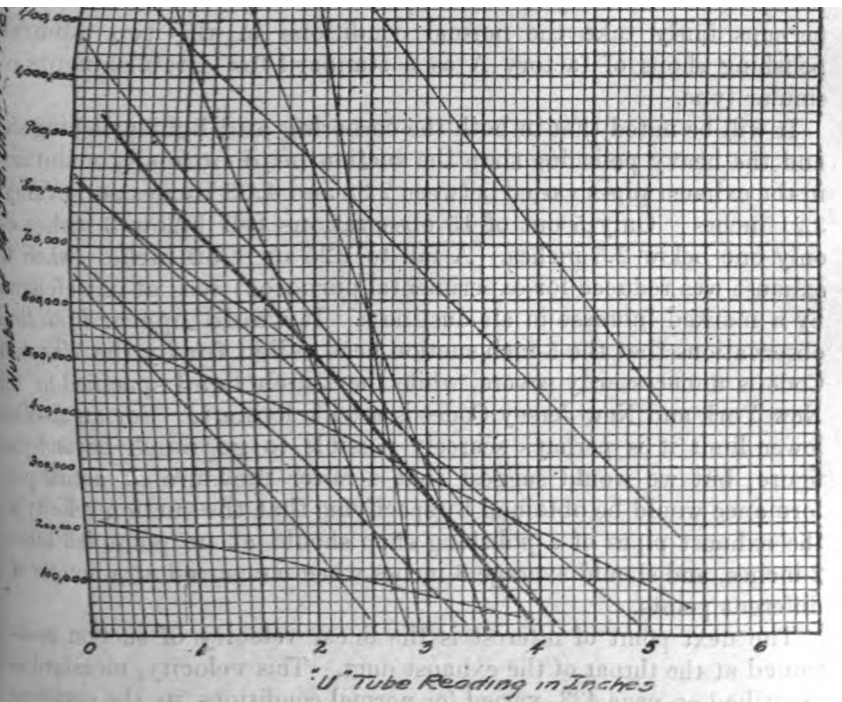

from 130,700 to 165,000 (7181–2), but usually very markedly. In five instances the count of dust particles increased more than tenfold—from 22,400 to 1,773,000 (6241–2), from 45,200 to 894,000 (6243–4), from 44,500 to 654,000 (6263–4), from 56,800 to 2,980,000 (7165–6), and from 52,200 to 638,000 (7193–4)

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It will be noted that in both the cornering and light polishing shop and the heavy polishing shop the suction head normally maintained in the exhaust pipes varied between 2.38 and 4.63 inches and averaged 3.21 inches. Only 5 out of 15 observations fell below 3 inches and only one below 2.5 inches. A fall to 1.25 or 1.50 inches (when the exhaust was reduced for experimental purposes) was at once followed by a marked increase in air dustiness. It would appear from these observations that the 5-inch suction head called for by the Wisconsin Code is unnecessarily severe, while the 2-inch head specified in the New York and New Jersey Codes is a trifle lenient. For an absolute lower limit it is perhaps scarcely possible to go much beyond this figure; but we would suggest that a fairer measure of actual performance would be obtained by specifying that the suction velocity in the exhaust pipes of a polishing shop should at no point fall below 2 inches, and should average 3 inches when measured at a number of different points.

The next point of interest is the linear velocity of suction maintained at the throat of the exhaust duct. This velocity, measured as described on page 433, varied for normal conditions in the cornering and light polishing shop from 1,470 to 4,905 feet per minute and averaged 2,409 feet per minute, while with the lowered exhausts the velocity varied from 418 to 1,340 feet per minute and averaged 845 feet. It would appear, then, that good conditions were main-

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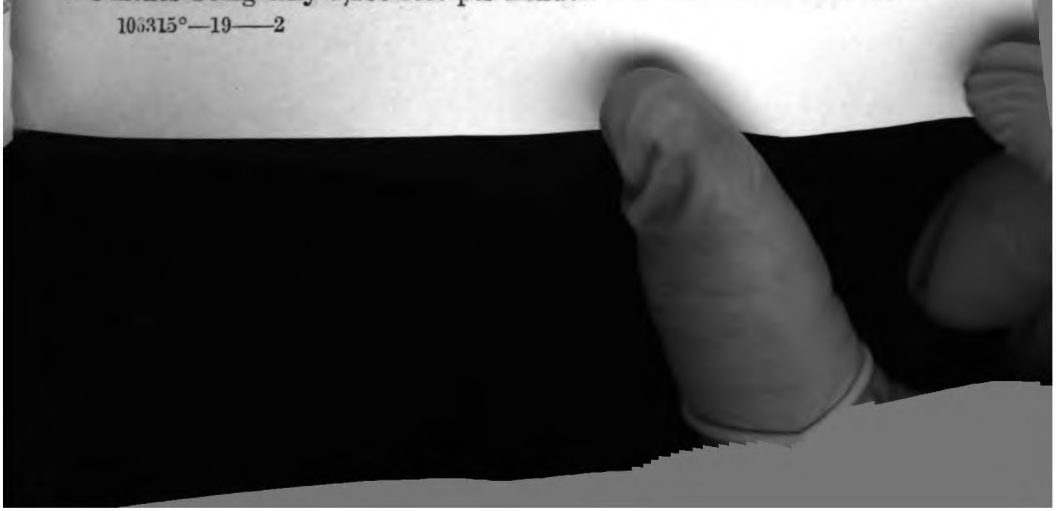
2 by 6 inches, with the 6-inch side parallel to the face of the wheel and adjustable. This type of hood would be more efficient if the opening were flared to about 4 by 7 inches, as with the narrow 2-inch opening a quantity of dust escapes into the air, especially if the operator is careless as to the position in which he holds work on the wheel. When this overhead type of exhaust hood is used, there is also a malleable-iron water pan under the wheel to catch dust that is carried past the exhaust hood. In the cornering and light polishing shop the pans are kept filled with water and catch a large amount of dust, but in the heavy polishing shop they are not used, and the majority of the men did not know what they were for.

(3) *The bayonet-shop hoods.*—This hood is used behind wheels on which bayonet blades are polished and sharpened and is a curved hood with flared sides, made of galvanized steel, adjustable to a close position to the wheel or to a distance of 18 inches from the wheel, as the operation may require. The exhaust enters through three narrow vertical openings, running from top to bottom of the hood, the top opening being 2 inches wide at its upper end, the three slits tapering to a width of one-half inch at the bottom of the lower opening. These hoods are probably as good as possible for this type of operation. Their chief drawback is that they offer an increased resistance on account of curved design, with a corresponding drop in the velocity, the velocity at the openings, with a U-tube reading of 3 inches being only 1,200 feet per minute.



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(4) *The hoods used on the belt type of polishing machine.*—These are the ordinary type of galvanized steel hood, one over each pulley at each end of the belt, the hoods being tapered to a 5-inch round pipe. These hoods seem satisfactory.

(5) *The common type of galvanized steel hood, as installed by plant workmen without expert supervision.*—It is this type of hood which causes much trouble. In many cases the hoods are practically worthless, due to the fact that the branch pipe connection to the hood is not placed in the proper position to catch dust as it is thrown from the wheel.

It is clear that the efficiency of any of the above hoods depends, not only on the velocity of the exhaust, but also, in large measure, on the proper location of the pipe connection to the hood. The dust from the polishing or grinding operation is thrown from the wheel at a tangent from the point of contact of the piece of work on the

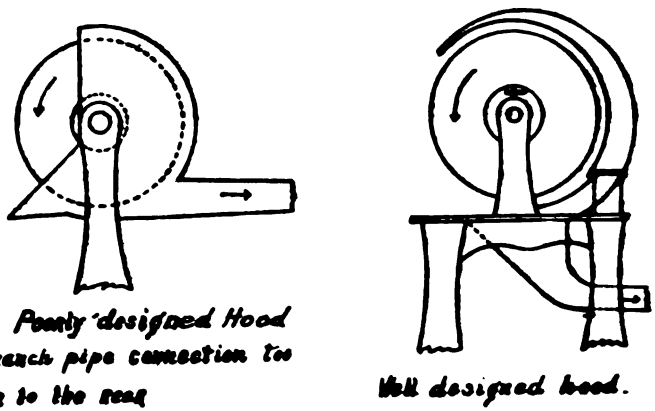

FIGURE 5.

wheel. If the exhaust hood or pipe connection to the hood is not located so that this stream of dust will enter directly into the mouth of the branch pipe, or in the case of the overhead hood, directly into the mouth of the hood, the speed with which this dust is thrown from the wheel will carry it past the exhaust hood or pipe, even though the velocity of exhaust is very high.

Other defects of exhaust systems which we have noticed are (1) the incorrect tapering of main ducts; (2) the use of too many elbows and of elbows of too square an angle; (3) the entering of branch pipes into the main duct at too square an angle.

Such conditions as those cited make it clear that the suction head maintained in the exhaust pipe, and even the linear velocity at its opening, below or above the wheel, can give only an imperfect idea of the actual condition of the shop air as regards dustiness. From the data presented in Tables 1 and 2 it seems possible to

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establish tentative standards in regard to the really important condition, the actual dustiness of the air.

First of all, it may be noted that the particles present in the air of the two polishing shops studied were chiefly small particles of the ½ standard unit size (2–10 microns). The average size of all dust particles in 30 samples of air was 0.28 standard unit or 0.00011 square millimeter. In other words, the average particle was close to 5.6 microns in diameter. The average weight of all dust particles in the same 30 samples was a little less than 0.000000086 milligram. The proportion of inorganic matter in the dust of the cornering and light polishing shop averaged 63 per cent; in the dust of the heavy polishing shop, 80 per cent.

The particles as they appeared under the microscope included both steel and emery, the former being in the majority. Particles of both types were almost all sharp and angular and the steel particles were generally of an elongated and jagged form. There were also obvious particles of lint present in the samples.

Turning now (from the standpoint of possible analytical standards) to the figures for the 15 samples taken with normal exhaust conditions, we find the average weight of dust in the air to be only 0.0237 milligram per cubic foot. Of the 15 weights, 3 were under 0.01 milligram, 6 between 0.01 and 0.02 milligram, 3 between 0.02 and 0.04 milligram, 2 between 0.04 and 0.06 milligram, and 1 over 0.06 milligram. We might fairly conclude from these data that the weight of dust in the air of a polishing shop can, with an efficient exhaust system, be kept constantly below 0.06 milligram per cubic foot and should not average over 0.03 milligram. These figures are lower than the standards of 0.14 milligram per cubic foot and 0.28 milligram per cubic foot set, respectively, by the South African commission and by Higgins and Lanza for mine air; but it is obvious that the air of a polishing shop can, and therefore should, be kept freer from dangerous dust than that of a metal mine.

It has been pointed out above that it is the small dust particles which are of chief importance, so that a standard based on the number of ½ standard unit (2–10 microns) particles in the air should prove even more valuable than one based on weight. The average count of the 15 samples collected under normal conditions as previously noted was 200,000 of such small particles per cubic foot. Four samples were under 50,000, 4 between 50,000 and 100,000, 5 between 100,000 and 300,000, and 2 over 300,000. It appears then that the dust content of a polishing shop can be kept generally under 300,000 small ½ standard unit dust particles per cubic foot and should not average over 200,000.

For comparison with the two well-ventilated shops which have been discussed, it may be interesting to cite results of our studies of another small grinding shop in factory A where conditions were much less satisfactory. This shop is a single basement room, approxi-

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mately 90 feet long, 36 feet wide, and 9 feet from floor to ceiling. The only means of securing general ventilation is by the door (8 by 8 feet) which opens on the north side of the building. There are six small windows in the room, but these are rarely opened.

The process carried on in this shop is the removal from the forged gun parts and bayonets of the fin which is generally to be found around their perimeter. This is accomplished by holding the forging in close contact with the abrasive wheel and moving it along the surface so that the whole fin is evenly removed. The composition of the metal is in general nickel steel and that portion removed by the abrasive wheel is mainly composed of the oxides of this steel.

The equipment consists of 18 solid grinding wheels mounted in pairs. Two of the wheels have no exhaust hoods, but are equipped with cast-iron guards only. These are wheels of fine texture and used only for very light work. Four of the wheels have hoods but no connection to the exhaust system. The 12 remaining wheels have hoods with a pipe connection at the rear. The suction pressure in the main line of piping, however, varies only from 0 to 1 inch static water pressure, largely as a result of the defective design of the exhaust system. The main duct from the fan to the machines is incorrectly tapered and too many elbows are used between the fan and the dust collector. The last section of the main duct from fan to machines is in this case a 6-inch pipe, and it has four 5-inch pipes with a combined area of 78 square inches connected into it. As the area of the 6-inch duct is only 28 square inches, the velocity of the last branch is zero, and conditions will never be satisfactory until a correctly designed system is installed.

Because of the fact that many different types of parts have to be handled, and also because the size of the fin which is to be removed varies greatly, the amount of dust generated will vary between wide limits. On some classes of work the amount of heavy dust generated is very considerable, but this in many cases does not show in the results of the analyses because such dust rapidly drops to the floor of the workroom.

TABLE 4.—*Dust determinations—Rough forge grinding shop, factory A.*

Sample No.	Sampling position.	Average number of particles per cubic foot of air, by sizes.			Total number of particles per cubic foot of air.	Standard units per cubic foot of air.	Solids per cubic foot of air (milligrams).
		25 standard units.	1 standard unit.	½ standard unit.			
6101	1	.....	5,000	194,000	199,000	31,100	6.05
6102	2	.....	11,000	193,000	204,000	32,000	.05
6172	2	.....	16,000	460,000	476,000	132,000	.25
6131	1	.....	21,000	327,000	348,000	102,000	.20
6201	2	.....	30,000	539,000	569,000	181,000	.35
6202	3	.....	36,000	509,000	540,000	170,000	.32

Rate of sampling, 4.5 and 4 cubic feet per minute, respectively. Volume of air samples, 113.160 and 201.5 cubic feet.

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The results of the experimental observations are shown in Table 4. It will be noted that the ½ standard unit particles which are of greatest interest range in number from 100,000 to 500,000, the average being 35?,000. With regard to the weight of the dust per cubic foot of air, the values range from 0.024 to 0.505 per cubic foot, the average being 241 milligrams per cubic foot. Only two samples were analyzed for the nature of the dust, 6201 and 6208. These showed that over 99 per cent of the dust was of inorganic nature.

The failure to comply with the standards suggested on page 445 is evidently due in this instance to obvious defects in the exhaust system, and it is clear that such a system as that at present installed should be radically reconstructed.

Observations in Regard to Air Dustiness in the Sand-blasting Room of Factory A.

It is obvious that different standards of air dustiness must be worked out for various industrial processes by a study of conditions actually maintained in well-operated shops. It may be of interest, however, to present here certain data obtained in a section of a workshop in factory A used for sand blasting.

The equipment consists of five sand-blasting cabinets, in which the operation is performed by passing the arms through open portholes in the cabinet and holding the object to be cleaned in the path of the sand blast, the operator guiding his movements by looking through a window in the face of the cabinet.

The dust in the air of this shop may arise from—

1. The agitation of the heaps of sand on the floor of the room.
2. The escape of sand through the porthole around the arm of the operator.

Table 5 shows the results of the analysis of samples of air in front of the sand-blasting cabinets. From this table it may easily be seen that the dust counts of ½ standard unit particles are very large, varying from 400,000 to 3,000,000, the average being 1,510,000, the weights of dust per cubic foot of air varying from 0.31 to 0.93 milligrams per cubic foot, and it will be observed that the dust is 97 per cent inorganic material.

In such a workshop as this we believe that if the floor were kept free from sand piles (the sand being stored in a covered bin), if the floor adjacent to the cabinets were kept sprinkled with water, and above all if the portholes opening into the cabinets were protected by tight sleeves through which the arm of the operator were passed, the air could be kept reasonably free from dust, probably well within the limits suggested for polishing shops.

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TABLE 5.—*Dust determinations—Sand blasting shop, Factory A.*

Sample No.	Date.	Sampling position.	Average number of particles per cubic foot of air, by sizes.			Total number particles per cubic foot of air.	Standard units per cubic foot of air.	Solids per cubic foot of air (mgs./cu. ft.).			Per cent of inorganic matter.
			25 standard units.	1 standard unit.	¼ standard unit.			Total.	Organic.	Inorganic.	
6140	June 14, 1918	Control									
6141		Machines 1 and 2	267	46,200	431,500	478,050	161,000	0.3175	0.0008	0.309	97.4
6142		Machines 2 and 4	267	79,500	715,000	794,767	262,000	.6070	.0015	.592	97.5
760	July 6, 1918	Control									
761		Machines 3 and 4		136,000	6,220,000	3,356,000	744,000	.9380	.0024	.9100	97.2
7100	July 10, 1918	Control									
7121		Machines 1 and 2		82,500	1,497,000	1,429,500	437,000	.6460	.0019	.6260	97.1

Rate of sampling 4.5 cubic feet per minute. Volume of samples, 250 and 300 cubic feet.

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A PRACTICAL TRAINING COURSE IN PUBLIC HEALTH ADMINISTRATION.

Preliminary announcement is made by the public health committee of the New York Academy of Medicine and the New York Bureau of Municipal Research of a practical training course in public health administration to be conducted jointly by these two agencies in New York City during the coming spring. The contemplated course will cover a period of six weeks beginning April 30, 1919. The first three weeks of the course will be devoted to lecture-conferences conducted by public health experts of national reputation, and the last three weeks to field study and observation of health work and institutions in and about New York City. No persons will be enrolled for the course who can not give assurance of attendance for at least the first three weeks of the course. The last three weeks of practical field study is, however, optional. During the first three weeks, a day or the major part of a day will be given to a lecture-conference on each topic of the program, sessions of the course being held daily except Sunday from 10 a. m. to 12 m. and from 2 to 4 p. m. A fee of $25 will be required of all students enrolling for the course.

The aim of the sponsors for this training course is to make it possible for the busy health executive to come in contact with the leaders of public health thought and action in the United States, and through such contact to acquire, for use in his own work, new ideas

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and new enthusiasm. It is not intended that this course shall compete in any way with the already established courses in public health offered by special schools, but rather that it shall bridge the gulf between the educational opportunity afforded health executives by the annual meeting of the American Public Health Association, and the long courses of training offered by the special schools. The administrative side of public health work will be stressed, technical medical knowledge being taken for granted.

Among the public health leaders who have already accepted the responsibility of conducting lecture-conferences are—

Lee K. Frankel, President of the American Public Health Association.

William T. Sedgwick, Professor of Biology and Public Health, Massachusetts Institute of Technology.

Hibbert W. Hill, M. D., Executive secretary of the Minnesota Public Health Association.

Charles V. Chapin, M. D., Superintendent of Health, Providence, R. I.

George W. Goler, M. D., Health Officer, Rochester, N. Y.

Leland E. Cofer, M. D., Health Officer, Port of New York.

A. J. McLaughlin, M. D., Assistant Surgeon General, United States Public Health Service.

L. L. Lumsden, M. D., Assistant Surgeon General, United States Public Health Service.

Alice Hamilton, M. D., Bureau of Labor Statistics, United States Department of Labor.

James Alexander Miller, M. D., Director, Tuberculosis Service, Bellevue Hospital, New York City.

Ella Phillips Crandall, R. N., Executive Secretary, National Organization for Public Health Nursing.

Charles F. Bolduan, M. D., Consultant, United States Public Health Service.

Henry B. Hemenway, M. D., Chief of Division of Public Health Instruction, Illinois State Health Department.

Augustus B. Wadsworth, M. D., Director of Laboratories, New York State Health Department.

A. E. Shipley, M. D., Major, Medical Corps, United States Army.

A brief tentative outline of the course follows:

Part I.—Introductory.

1. The public health movement, with special reference to the work of the American Public Health Association.
2. The economics of health.
3. State and municipal health departments—scope, functions, and relations.
4. The United States Public Health Service—origin, history, and functions.
5. Private health agencies—scope, functions, and relation to public agencies

Part II.—Public Health Administration—Organization, Legal and Financial Aspects.

1. The principles of business efficiency.
2. The health budget; its relation to administrative efficiency.
3. Sanitary codes and laws; legal aspects of public health administration.
4. The organization and administration of a health department—functions, divisions of work, personnel.

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Part III.—Administration of Special Health Functions.

1. Vital statistics.
2. Communicable diseases.
3. Contagious disease hospitals.
4. The health laboratory.
5. Tuberculosis.
6. Venereal diseases.
7. Industrial hygiene.
8. Mental hygiene.
9. The child welfare program.
10. Medical inspection of schools.
11. Public health nursing.
12. Hospitals and dispensaries.
13. General sanitation.
14. Food and drugs.
15. Rural hygiene.
16. Public health education.
17. Maritime quarantine.

Applications for enrollment in the course may be sent to Dr. Carl E. McCombs, Bureau of Municipal Research, 261 Broadway, New York City. It is intended, if possible, to limit enrollments to 50, and to give first consideration to those actually engaged in public health administration. If the number of applicants is sufficient to warrant extending the opportunity to more than 50 public health executives and to other health workers outside the field of public administration, such arrangement will be made if it is otherwise practicable.

DEATHS DURING WEEK ENDED FEBRUARY 22, 1919, IN CITIES.

The following table shows the registered deaths from all causes, and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended February 22, 1919. The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown.

The data are taken from the "Weekly Health Index," February 25, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.

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Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended Feb. 22, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Death rate for preceding years.[1]	Influenza and Pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	48	22.2	C 18.5	10	4.6
Atlanta, Ga.	201,732	76	19.6	C 17.3	.....	.....
Baltimore, Md.	[2]669,981	335	26.1	A 19.6	90	7.0
Birmingham, Ala.	197,670	70	18.5	A 18.4	.....	.....
Buffalo, N. Y.	473,229	154	17.0	C 15.0	34	3.7
Cambridge, Mass.	111,432	32	15.0	A 15.8	6	2.8
Chicago, Ill.	2,596,681	848	17.0	A 17.2	283	5.7
Cincinnati, Ohio.	418,022	188	23.5	C 18.1	35	4.7
Cleveland, Ohio.	810,306	243	15.6	C 10.7	.....	.....
Columbus, Ohio.	225,296	90	20.8	C 20.1	20	4.6
Dayton, Ohio.	130,655	39	15.6	C 14.4	11	4.4
Denver, Colo.	.....	92	.....	.....	.....	.....
Fall River, Mass.	128,392	64	26.0	C 13.0	.....	.....
Indianapolis, Ind.	289,577	117	21.1	C 13.9	.....	.....
Kansas City, Mo.	313,785	133	22.1	C 14.5	46	7.6
Los Angeles, Cal.	568,495	134	12.3	A 13.8	8	.7
Louisville, Ky.	242,707	113	24.3	C 21.3	37	8.0
Lowell, Mass.	109,081	34	16.3	A 21.5	4	1.9
Memphis, Tenn.	154,759	100	33.7	C 17.5	20	6.7
Milwaukee, Wis.	453,481	101	11.6	A 14.3	.....	.....
Minneapolis, Minn.	383,442	124	16.9	C 10.1	.....	.....
Nashville, Tenn.	119,215	70	30.6	C 17.9	23	9.1
Newark, N. J.	428,684	137	16.7	C 16.5	46	5.6
New Haven, Conn.	154,565	45	15.2	C 15.5	.....	.....
New Orleans, La.	392,273	167	22.8	A 28.7	44	6.0
New York, N. Y.	[3]5,215,879	2,129	21.3	C 15.8	738	7.9
Oakland, Cal.	214,206	29	7.1	A 12.7	.....	.....
Philadelphia, Pa.	1,761,371	720	21.3	[4]18.8	231	6.8
Pittsburgh, Pa.	593,303	279	24.5	C 16.8	137	12.0
Portland, Oreg.	.....	70	.....	.....	12	.....
Providence, R. I.	263,613	91	18.0	C 15.2	14	2.8
St. Louis, Mo.	779,951	231	15.4	C 14.7	.....	.....
St. Paul, Minn.	257,699	52	10.5	C 11.5	.....	.....
San Francisco, Cal.	478,530	157	17.1	C 15.6	18	2.0
Seattle, Wash.	.....	45	.....	.....	12	.....
Spokane, Wash.	.....	26	.....	.....	.....	.....
Syracuse, N. Y.	161,404	48	15.5	C 16.5	.....	.....
Toledo, Ohio.	262,234	81	16.1	A 15.1	21	4.1
Washington, D. C.	401,681	141	18.3	A 19.4	28	3.6
Worcester, Mass.	173,650	68	20.4	C 15.3	.....	.....

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

Telegraphic reports for the week ended March 1, 1919, received by the Public Health Service show little change in the prevalence of influenza throughout the country. These reports are sent by State health officers and by officers of the Public Health Service in charge of health work in civil zones around Army camps.

Decreases in the number of reported cases of influenza as compared with the preceding week were shown in Alabama, Arkansas,

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California, Connecticut, Iowa, Kansas, Louisiana, Maine, New Jersey, North Carolina, and Vermont. Slight increases were noted in Illinois, Oregon, and Virginia. (See p. 460.)

Most of the zones around military camps show decreases in the number of cases reported, but some increase is noted in Camp Polk zone, N. C., and a decided increase in the zone around Camp Zachary Taylor, which includes the city of Louisville, Ky. (See p. 464.)

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED MAR. 1.

CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	Cases.
Influenza	16
Measles	2
Tuberculosis	1
Typhoid fever	1

CAMP DEVENS ZONE MASS.

Lancaster:	
Measles	1
Mumps	2
Scarlet fever	2
Whooping cough	5
Lunenburg:	
Measles	6

FAYETTEVILLE SANITARY DISTRICT, N. C.

Influenza	3
Measles	11
Meningitis	1
Pneumonia	2
Smallpox	3
Tuberculosis, pulmonary	2

CAMP FUNSTON ZONE, KANS.

Junction City:	
Diphtheria	1
Influenza	5
Mumps	1
Scarlet fever	4
Manhattan:	
Diphtheria carriers	3
Gonorrhea	4
Influenza	18
Mumps	4
Pneumonia	1
Scarlet fever	5

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Chancroid:	Cases.
Columbus	1
Gonorrhea:	
Columbus	10
Girard	3
Muscogee County	1
Influenza:	
Bibb City	2
Columbus	3
Phenix City	6
Measles:	
Columbus	1
Pellagra:	
Columbus	1
Pneumonia:	
Columbus	4
Girard	1
Smallpox:	
Muscogee County	6
Syphilis:	
Columbus	5
Girard	1
Tuberculosis:	
Columbus	2

CAMP EBERTS ZONE, ARK.

Chicken pox:	
Ward	2
Influenza:	
Austin, R. F. D.	1
Cabot	6
Measles:	
England	1
Mumps:	
Lonoke, R. F. D.	3
Pneumonia:	
England	1
Ward	2

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GERSTNER FIELD ZONE, LA.

	Cases.
Influenza	9
Smallpox	5
Syphilis	1
Typhoid fever	1

CAMP GORDON ZONE, GA.

	Cases.
Atlanta:	
Cerebrospinal meningitis	1
Chicken pox	3
Diphtheria	2
Gonorrhea	13
Influenza	53
Measles	3
Mumps	2
Pneumonia	1
Scarlet fever	5
Smallpox	53
Syphilis	18
Typhoid fever	1

GULFPORT HEALTH DISTRICT, MISS.

	Cases.
Chicken pox:	
Pascagoula	1
Dysentery:	
Moss Point	1
Gonorrhea:	
Pascagoula	1
Pearlington	1
Influenza:	
Biloxi	2
Escatawpa	3
Ford	1
Gulfport	8
Lizana	1
Long Beach	6
Mississippi City	1
Moss Point	2
Orange Grove	4
Pascagoula	1
Malaria:	
Biloxi	1
Gulfport	3
Moss Point	3
Vidalia	1
Wareland	1
Measles:	
Gulfport	1
Lyman	7
Mumps:	
Biloxi	1
Gulfport	1
Mississippi City	3
Moss Point	4
Pascagoula	3
Pneumonia:	
Bay St. Louis	1
Fenton	1
Gulfport	3
Logtown	1
Orange Grove	1
Pass Christian	1
Pneumonia, broncho:	
Mississippi City	2
Ocean Springs	1

GULFPORT HEALTH DISTRICT, MISS.—continued.

	Cases.
Typhoid fever:	
Biloxi	1
Gulfport	2
Handsboro	1
Pass Christian	1
Scattered	1
Whooping cough:	
Biloxi	5
Debuys	1
Moss Point	1

CAMP JACKSON ZONE, S. C.

	Cases.
Columbia:	
Influenza	5
Measles	2
Mumps	9
Pneumonia	1
Typhoid fever	1
Whooping cough	1
Government clinic:	
Gonorrhea	5
Syphilis	10

CAMP LEE ZONE, VA.

	Cases.
Petersburg:	
Gonorrhea	7
Scarlet fever	1
Syphilis	5
Prince George County:	
Influenza	2

CAMP LEWIS ZONE, WASH.

	Cases.
Measles:	
Steilacoom	3
Mumps:	
American Lake	11
Tuberculosis:	
Dupont	1

CAMP M'CLELLAN ZONE, ALA.

	Cases.
Gonorrhea:	
Anniston	10

CAMP MERRITT ZONE, N. J.

	Cases.
Cresskill:	
Influenza	2
Pneumonia	2
Englewood:	
Chicken pox	1
Influenza	25
Mumps	1
Pneumonia	5

MUSCLE SHOALS SANITARY DISTRICT, ALA.

	Cases.
Colbert County:	
Diphtheria	1
Measles	3
Smallpox	1
Lauderdale County:	
Diphtheria carriers	2
Measles	3
Mumps	1
Smallpox	4
Syphilis	

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PICRIC ACID PLANT ZONE, GA.

Brunswick:	Cases.
Gonorrhea	2
Influenza	2
Measles	6
Smallpox	1
Syphilis	2

CAMP PIKE ZONE, ARK.

Chancroid:	
Little Rock	1
Chicken pox:	
Little Rock	8
Gonorrhea:	
Little Rock	10
North Little Rock	6
Scott	1
Influenza:	
Little Rock	4
North Little Rock	3
Malaria:	
Little Rock	1
North Little Rock	1
Measles:	
Little Rock	3
Mumps:	
Little Rock	10
North Little Rock	1
Pneumonia:	
Little Rock	4
North Little Rock	3
Scott	1
Scarlet fever:	
Little Rock	4
Syphilis:	
Little Rock	5
North Little Rock	1
Tuberculosis:	
Kerr	1
Little Rock	2
Scott	1

CAMP POLK ZONE, N. C.

Chicken pox:	
Durham	11
Raleigh	1
Diphtheria:	
Durham County	1
Raleigh	1
Gonorrhea:	
Durham County	1
Influenza:	
Durham	1
Raleigh	128
Wake County	73
Measles:	
Durham	1
Wake County	4
Mumps:	
Durham	6
Pneumonia:	
Durham	1
Scarlet fever:	
Durham County	1
Septic sore throat:	
Raleigh	1

CAMP POLK ZONE, N. C.—continued.

Smallpox:	
Raleigh	1
Wake County	1
Syphilis:	
Durham	1
Tuberculosis:	
Durham	1
Raleigh	1

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Chicken pox:	
Norfolk	1
Diphtheria:	
Norfolk	1
Gonorrhea:	
Portsmouth	6
Influenza:	
Norfolk	18
Measles:	
Norfolk	1
Norfolk County	6
Scarlet fever:	
Norfolk	1
Norfolk County	1
Smallpox:	
Norfolk County	1
Portsmouth	4
Syphilis:	
Portsmouth	1
Tuberculosis:	
Norfolk County	1

CAMP SEVIER ZONE, S. C.

Tuberculosis:	
Greenville	1

CAMP SHERIDAN ZONE, ALA.

Government clinic:	
Gonorrhea	9
Syphilis	12
Montgomery:	
Scarlet fever	1
Tuberculosis	2
Typhoid fever	1

CAMP SHERMAN ZONE, OHIO.

Gonorrhea:	
Government clinic	3
Influenza:	
Chillicothe	46
Ross County	41
Scarlet fever:	
Liberty Township	1
Tuberculosis:	
Chillicothe	1

SOUTHER FIELD ZONE, GA.

Americus:	
Gonorrhea	1
Sumter County:	
Gonorrhea	1
Influenza	24
Tuberculosis	1
Whooping cough	1

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CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

	Cases.
Chancroid:	
Government clinic	2
Chicken pox:	
Louisville	3
Diphtheria:	
Jefferson County	1
Jeffersonville	2
Louisville	6
Gonorrhea:	
County jail clinic	9
Government clinic	42
Influenza:	
Clark County	15
Jefferson County	185
Jeffersonville	60
Louisville	505
New Albany	19
Measles:	
Jefferson County	2
Louisville	2
Mumps:	
Jefferson County	1
Pneumonia:	
Louisville	16
Scarlet fever:	
Jefferson County	2
Louisville	5
New Albany	1
Smallpox:	
Louisville	2
Syphilis:	
Government clinic	37
Tuberculosis, pulmonary:	
Louisville	1

TIDEWATER HEALTH DISTRICT, VA.

Cerebrospinal meningitis:	
Newport News	1
Chicken pox:	
Phoebus	1
Riverview	1
Diphtheria:	
Newport News	1
Gonorrhea:	
Newport News	35
Influenza:	
Newport News	1
Measles:	
Newport News	2
Phoebus	2
Riverview	1

TIDEWATER HEALTH DISTRICT, VA.—continued.

Mumps:	
Newport News	2
Phoebus	1
Pneumonia:	
Newport News	2
Scarlet fever:	
Hampton	1
Newport News	1
Smallpox:	
Foxhill	5
Hampton	1
Newport News	2
Syphilis:	
Newport News	4
Venereal (other than gonorrhea and syphilis):	
Newport News	3
Whooping cough:	
Newport News	2
Phoebus	1

CAMP UPTON ZONE, N. Y.

Brook Haven:	
Pneumonia	1
Tuberculosis	1

CAMP WHEELER ZONE, GA.

Macon:	
Chicken pox	2
German measles	1
Influenza	4
Scarlet fever	1
Smallpox	1

WILMINGTON SANITARY DISTRICT, N. C.

Sunset Park:	
Malaria	1
Wilmington:	
Diphtheria	1
Gonorrhea	1
Influenza	8
Meningitis	1
Scarlet fever	1
Tuberculosis	1
Typhoid fever	1
Whooping cough	1
Winter Park:	
Malaria	1

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DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended February 21, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	1,202.50	1,162.94
All troops in United States	1,442.95	1,388.10
American Expeditionary Forces	1,115.09	1,084.66
Annual admission rate per 1,000 (disease only)	977.99	939.14
All troops in United States	1,213.62	1,172.34
American Expeditionary Forces	885.17	844.68
Noneffective rate per 1,000 on day of report	52.92	49.39
All troops in United States[1]	68.73	66.15
American Expeditionary Forces	40.13	33.46
Annual death rate per 1,000 (all causes)	15.95	14.36
All troops in United States[1]	10.47	10.02
American Expeditionary Forces	17.89	13.39
Annual death rate per 1,000 (disease only)	12.91	9.78
All troops in United States[1]	9.85	10.00
American Expeditionary Forces	13.99	9.67

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. [2] The continued influx of sick and wounded (properly charged to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

Cases of special diseases reported during the week ended Feb. 21, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
Beauregard				18						1,709.22	38.28
Bowie	11			16	12	7	31			1,743.11	108.99
Fremont				3						888.88	38.31
Greene	4		1	7	1	4	1			1,407.42	45.39
Hancock	3			24	4	6			2	850.60	58.37
Kearny				30	3					995.67	46.39
Logan	5			24		8	1			1,003.18	46.13
MacArthur	1		1	5		1				1,174.81	47.68
McClellan	3			28						696.62	108.68
Pevier				2		3				813.27	38.28
Shelby	3			7	3	2	1			1,734.48	70.73
Sheridan	3			7	4					1,180.68	68.57
Wadsworth	1			21	18					2,051.30	68.68
Wheeler	2		1	16		3	3			1,042.26	38.73
Custer	3			10	9		1		4	1,144.28	38.28
Devens	1			19	3	2			1	1,937.97	38.25
Dix	7			14	3	1	4		1	1,051.77	38.68
Dodge	3			12	6	5	1		9	1,548.22	113.67
Eustis	2			2		2				871.98	37.29
Funston	3			9		6			11	804.68	34.98
Gordon	1			16		18	1			1,627.35	38.68
Grant	6			5		5	14			1,213.23	73.87
Humphreys	3			8	2	2	3			733.25	37.68
Jackson	10			27		18	5	1		798.23	38.68
Henry Knox	2									1,965.40	68.28
Las Casas			8	1		1				948.41	44.29
Lee	4		1	23	13	4			3	1,133.08	38.68
Lewis	13			13	2	4	1		2	1,204.21	68.28
Meade	5			17	5	2			7	3,612.21	108.68

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Cases of special diseases reported during the week ended Feb. 21, 1919—Continued.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
				Total.	New infections.						
Pike	6	.....	2	26	.....	8	.....	.....	2	1,648.05	110.51
Sherman	2	.....	.....	13	.....	21	.....	.....	4	1,375.64	117.84
Taylor	28	.....	.....	14	8	82	1	2	4	1,535.12	110.85
Travis	5	1	1	31	2	3	11	.....	1	2,011.60	82.78
Upton	22	.....	.....	14	4	36	1	.....	.....	1,551.49	89.39
Northeastern Department	1	.....	.....	5	4	.....	.....	.....	1	683.94	30.56
Eastern Department	4	.....	.....	20	8	22	1	.....	.....	847.02	25.12
Southeastern Department	.....	.....	.....	10	4	11	.....	.....	.....	1,165.71	35.50
Central Department	1	.....	.....	3	.....	4	.....	.....	.....	1,127.46	31.47
Southern Department	5	.....	.....	74	12	76	2	.....	3	976.51	54.93
Western Department	1	.....	.....	12	1	1	.....	.....	.....	647.67	20.96
Aviation camps	2	.....	.....	21	.....	14	2	.....	.....	835.68	39.07
Port of embarkation:											
Hoboken	25	.....	.....	11	.....	85	1	.....	1	1,393.10	122.88
Newport News	22	.....	.....	111	7	41	3	2	14	4,051.48	129.09
Alcatraz Disciplinary Barracks	.....	.....	.....	.....	.....	.....	.....	.....	.....	684.21	16.44
Leavenworth Disciplinary Barracks	5	.....	.....	7	.....	.....	.....	.....	.....	1,355.12	43.35
Columbus Barracks	2	.....	.....	2	1	.....	.....	.....	.....	893.60	40.73
Jefferson Barracks	7	.....	.....	6	2	7	.....	.....	.....	2,202.77	87.49
Fort Logan	.....	.....	.....	1	1	.....	.....	.....	.....	851.63	34.68
Fort McDowell	1	.....	.....	.....	.....	.....	.....	.....	.....	1,129.95	38.74
Fort Sill	.....	.....	.....	10	10	13	.....	.....	.....	633.37	41.26
Fort Slocum	.....	.....	.....	2	.....	.....	.....	.....	.....	411.47	40.55
Fort Thomas	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,356.94	67.98
West Point	.....	.....	.....	.....	.....	.....	.....	.....	.....	519.69	14.10
Arsenals	5	.....	.....	11	3	7	2	.....	.....	810.53	35.44
Miscellaneous small stations	2	.....	.....	16	.....	14	2	.....	.....	735.51	38.72
Total	245	1	15	864	155	550	96	5	70	1,213.62	63.73

Number of deaths and annual rates per 1,000 at large camps in United States, week ended Feb. 21, 1919.

Camp.	Strength.	Deaths.		Deaths, annual rate per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Beauregard	4,743	1	1	10.95	10.95
Bowie	5,668	.....	.....	.....	.....
Fremont	1,568	.....	.....	.....	.....
Greene	4,175	1	1	12.45	12.45
Hancock	7,825	1	1	6.64	6.64
Kearny	5,109	.....	.....	.....	.....
Logan	4,400	.....	.....	.....	.....
MacArthur	5,400	.....	.....	.....	.....
McClellan	4,532	.....	.....	.....	.....
Sevier	4,220	2	1	24.64	12.32
Shelby	4,312	.....	.....	.....	.....
Sheridan	4,008	.....	.....	.....	.....
Wadsworth	4,613	.....	.....	.....	.....
Wheeler	2,230	.....	.....	.....	.....
Custer	8,997	2	2	11.55	11.55
Devens	8,278	1	1	6.28	6.28
Dix	20,321	1	1	2.55	2.55
Dodge	12,363	3	3	12.62	12.62
Eustis	3,817	.....	.....	.....	.....
Funston	12,735	2	2	8.16	8.16
Gordon	9,246	2	2	11.24	11.24
Grant	17,398	3	3	8.96	8.96

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Number of deaths and annual rates per 1,000 at large camps in United States, week ended Feb. 21, 1919—Continued.

Camp.	Strength.	Deaths.		Deaths, annual rate per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Humphreys	9,654	2	2	10.77	10.77
Jackson	11,086	4	4	17.79	17.79
J. E. Johnston	3,122	3	3	49.96	49.96
Henry Knox	3,122	3	3	49.96	49.96
Las Casas	1,919				
Lee	16,203	3	3	9.62	9.62
Lewis	14,253				
Meade	11,794	1	1	4.41	4.41
Pike	9,055	3	3	16.25	16.25
Sherman	12,891	2	2	8.06	8.06
Taylor	17,140	12	12	36.40	36.40
Travis	10,345	2	2	10.05	10.05
Upton	14,684	6	6	21.25	21.25
Northeastern Department	5,170				
Eastern Department	30,883				
Southeastern Department	5,576	2	1	18.65	9.33
Central Department	5,719	1	1	9.40	9.40
Southern Department	40,633	4	4	5.11	5.11
Western Department	11,189				
Aviation camps	32,732	5	2	7.94	3.17
Ports of embarkation:					
Hoboken	26,391	8	8	15.76	15.76
Newport News	30,383	4	4	6.84	6.84
All others	112,934	38	36	17.50	16.69
Total	590,917	119	112	10.47	9.85

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	21.86	17.09	30.89	21.25
Dysentery	.08	.16	1.05	.62
Malaria	1.32	1.33	.21	.11
Venereal	70.75	79.49	44.10	36.94
Paratyphoid			.40	.39
Typhoid	.17	1.16	2.87	2.94
Measles	8.44	6.75	1.30	2.67
Meningitis	.44	.66	1.70	2.71
Scarlet fever	6.16	6.82	1.79	1.68
Influenza	48.40	58.13		

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended March 1, 1919.

Alabama.—State totals: Typhoid fever 4, malaria 3, smallpox 22, measles 27, scarlet fever 11, diphtheria 5, cerebrospinal meningitis 7, influenza 212.

Arkansas.—State totals: Influenza 24, smallpox 14, measles 18, malaria 8, chicken pox 5, typhoid fever 3, scarlet fever 1.

California.—Influenza cases reported 147. Smallpox: Chico 9, Ontario 1, Sacramento city 2, Los Angeles city 2, Humboldt County 2, Oakland 2, Marysville 9, Santa Ana 1, Yuba County 5. Typhoid

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fever: Los Angeles 3, Oakland 1, Sacramento County 2, Riverside County 7, Riverside city 2.

Connecticut.—No outbreak nor unusual prevalence. Influenza total for State, 224 cases.

Florida.—One case of poliomyelitis in Marion County. No unusual prevalence.

Illinois.—Diphtheria 148; of which in Chicago 118, Peoria 5. Scarlet fever 144; of which in Chicago 69, Hickory Township (Coles County) 9, Suez Township (Mercer County) 7, Quincy 6, Rogers Township (Ford County) 5. Smallpox 68; of which in Salem 22, Pekin 10, America Township (Pulaski County) 9, Springfield 5, Bloomington 4. Meningitis; Chicago 2, Normal Township (McLean County) 1. Poliomyelitis; Crete 1. Gonorrhea 109, syphilis 108, influenza 1,707 (of which in Chicago 480). Recrudescence of influenza noted in following Illinois communities: Versailles 62, Spring Forest 35, Dupage County (Winfield Township) 19, Hamilton County (Mayberry Township) 36, Jackson County (Desoto Township) 40, Jefferson County (Casner Township) 17, Havana 22, Joppa 79, Industry 61, Menard County (Petersburg precinct) 19, St. John 12, Auburn 13, Saline County (Long Branch Township) 18, Washington 14.

Indiana.—Scarlet fever: Marshall County, epidemic Greenfield. Smallpox: Elkhart, Bedford, Coxville, Huntington, epidemic at Ovid and in Addison County. Typhoid fever: Shelby County 1, Jefferson County 2. Diphtheria: Randolph County 1, Lake 1, Vigo 1, Fountain 2, epidemic Fort Wayne. Syphilis: Cases reported 32. Gonorrhea: Cases reported 51.

Iowa.—Cerebrospinal meningitis: Liscomb 1. Chancroid: Council Bluffs 2. Diphtheria: Afton 1, Atlantic 1, Des Moines 8, Dubuque 1, Mason City 1, Postville 2. Gonorrhea: Correctionville 2, Council Bluffs 6, Davenport 6, Des Moines 2, Dubuque 1, Iowa City 1, Lake City 1, Marshalltown 2. Measles: Bellevue 3. Scarlet fever: Ackley 2, Albion 1, Bellevue 1, Burlington 4, Des Moines 8, Dubuque 1, Goodell 1, Ottosen 1, Seymour 1. Smallpox: Cedar Rapids 4, Davenport 3, Des Moines 1, Mason City 5, Ottumwa 5, Vinton 2. Syphilis: Council Bluffs 2, Davenport 13, Des Moines 4, Perry 1. In rural districts of following counties. Diphtheria: Chickasaw 1. Scarlet fever: Chickasaw 3, Dickinson 6, Grundy 1, Humboldt 2, Mills 1, Monona 1. Smallpox: Harrison 1, Story 1. Influenza cases reported in State 224.

Kansas.—Meningitis: Kansas City 1, Newton 1, Wichita 1. State totals: Smallpox 59, diphtheria 23, scarlet fever 53, influenza 2,212.

Louisiana.—State totals: Influenza 180, meningitis 2, smallpox 64, typhoid fever 8, diphtheria 5.

Maine.—Diphtheria: Friendship 1, Portland 1. Gonorrhea: Augusta 1, Bath 4, Calais 1, Carmel 1, Lewiston 1, Montville 1, Portland,

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cases of pneumonia reported 1031. Venereal reported: Syphilis 151, gonorrhea 34.

North Carolina.—State totals: Whooping cough 99, measles 207, diphtheria 15, scar et fever 10, septic sore throat 2, smal pox 60, chicken pox 27, typhoid fever 9, epidemic meningitis 2, broncho-pneumonia 49, lobar pneumonia 30, ophthalmia neonatorum 1, amebic dysentery 1, syphilis 9, gonorrhea 20, chancroid 1. Influenza cases reported: Alamance County 56, Cleveland County 75, Cumberland County 13, Davidson County 31, Gaston County 2, city of Charlotte 46.

Ohio.—Smallpox: Jefferson Township (Coshocton County) 16; continues epidemic Dennison, Tuscarawas County, and Montgomery County. Influenza: Material increase, mild character.

Oregon.—Influenza: Portland 61 cases (2 deaths), Benton 3, Clackamas 9, Hood River 1, Linn 2, Marion 7, Union 4, Washington 3.

Vermont.—Sixteen towns reported 94 cases of influenza. No other unusual prevalence.

Virginia.—Influenza cases reported 480; 2 cases of smallpox Alexandria County, 3 cases at Norfolk.

ANTHRAX.

City Report for Week Ended Feb. 15, 1919.

Three deaths from anthrax were reported at Fremont, Nebr., during the week ended February 15, 1919.

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CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 1, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga	1	Tidewater health district, Va	1

State Reports for January, 1919.

Place.	New cases reported.
Florida:	
DeSoto County	1
Gadsden County	2
Total	3
Indiana:	
Randolph County	1
Steuben County	1
St. Joseph County	1
Switzerland County	1
Total	4
Iowa:	
Butler County	1
Maine:	
Cumberland County—	
Standish (town)	1
Mississippi:	
Chickasaw County	2
Coahoma County	1
Lafayette County	1
Sunflower County	1
Total	5
New Jersey:	
Bergen County	1
Camden County	1
Essex County	7
Hudson County	1
Mercer County	1
Middlesex County	1
Passaic County	5
Union County	1
Total	18
New York (exclusive of New York City):	
Erie County—	
Buffalo	4
Lackawanna	1
Nassau County—	
Hempstead (town)	1
New York (exclusive of New York City)—Continued.	
Oneida County—	
Paris (town)	1
Onondaga County—	
Syracuse	1
Rensselaer County—	
Troy	1
Total	9
North Carolina:	
Catawba County	1
Forsyth County	1
Harnett County	1
Jackson County	1
Mecklenburg County	2
Northampton County	1
Randolph County	1
Transylvania County	1
Total	9
Ohio:	
Athens County	1
Clinton County	1
Hamilton County	2
Pickaway County	1
Summit County	3
Total	8
Pennsylvania:	
Cambria County	2
Centre County	1
Cumberland County	1
Delaware County	1
Indiana County	1
Luzerne County	1
Northumberland County	1
Philadelphia County	3
Schuylkill County	1
Total	12
South Carolina:	
Spartanburg	1

City Reports for Week Ended Feb. 15, 1919.

Place.	Cases.	Deaths.
Alton, Ill		1
Atlanta, Ga	1	1
Austin, Tex	1	
Baltimore, Md	4	
Bellaire, Ohio	1	
Birmingham, Ala		1
Boston, Mass		1
Chicago, Ill	1	
Cincinnati, Ohio	1	1
Columbia, S. C	1	
Council Bluffs, Iowa	1	
Dallas, Tex	1	
El Paso, Tex		1
Fall River, Mass		1
Highland Park, Mich	3	3
Kansas City, Mo	1	1
Lawrence, Mass	1	1
Memphis, Tenn	1	
Milwaukee, Wis	2	2
Nashville, Tenn		1
Newark, N. J	2	1
New Orleans, La	1	
New York, N. Y	6	2
Philadelphia, Pa	1	
Pontiac, Mich	1	1
Portland, Oreg	1	
Providence, R. I		1
Roanoke, Va		1
St. Louis, Mo	1	
San Antonio, Tex	1	1
San Francisco, Cal	1	

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Coahoma County	11	Montgomery County	3
Copiah County	4	Neshoba County	7
Covington County	1	Newton County	1
De Soto County	4	Pearl River County	7
Forrest County	11	Pike County	3
Franklin County	1	Prentiss County	5
George County	3	Quitman County	2
Hinds County	29	Sharkey County	2
Holmes County	4	Stone County	1
Humphreys County	6	Sunflower County	9
Issaquena County	1	Tallahatchie County	10
Itawamba County	3	Tunica County	8
Jackson County	1	Walthall County	1
Jasper County	1	Washington County	9
Jefferson Davis County	1	Wayne County	3
Jones County	4	Yazoo County	12
Kemper County	4		
Lamar County	1	Total	253

City Reports for Week Ended Feb. 15, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala		2	Minneapolis, Minn	1	1
Charleston, S. C		1	Raleigh, N. C		1
Memphis, Tenn		1	Winston-Salem, N. C	1	1

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Plainfield, N. J	1	1		
Pontiac, Mich	1	3		
Port Chester, N. Y	1	2		
Quincy, Ill	2	3		
Quincy, Mass	1			
Riverside, Cal			2	1
Rochester, N. Y	9	5		
Saginaw, Mich	1	1		
Salem, Mass	3	2		
San Antonio, Tex	14	10		
Sandusky, Ohio	1			
San Francisco, Cal	7	7		
Santa Barbara, Cal			2	
Saratoga Springs, N. Y	1			
Sault Ste. Marie, Mich	1			
Schenectady, N. Y	2	1		
Somerville, Mass	2	1		
Springfield, Ill	1			
Springfield, Mass	17	4		
Tiffin, Ohio	1	1		
Topeka, Kans	1	1		
Trenton, N. J	2	3		
Troy, N. Y	2			
Utica, N. Y	1	3		
Wichita, Kans	2	1		
Winston-Salem, N. C	5	2		
Worcester, Mass	9			
Yonkers, N. Y			2	9
Youngstown, Ohio	2	2		

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Cape May County	1					1
Cumberland County	1					1
Total	8			2	4	2
New York (exclusive of New York City):						
Erie County—						
Buffalo	5					5
West Seneca (town)	1				1	
Oswego County—						
Oswego	6				1	5
New Haven (town)	2					2
Total	14				2	12
Ohio:						
Belmont County	1					1
Butler County	129		2	3	60	64
Clark County	1					1
Clinton County	1				1	
Coshocton County	18					18
Crawford County	2				1	1
Cuyahoga County	48				1	47
Fayette County	16				8	8
Franklin County	2				2	
Gallia County	11		1		10	
Geauga County	5				1	4
Hamilton County	12				6	6
Highland County	13				9	4
Jefferson County	4			1	1	2
Licking County	4					4
Lorain County	21				6	15
Lucas County	14					14
Mahoning County	8					8
Marion County	4				1	3
Miami County	2					2
Montgomery County	37				29	8
Muskingum County	3				2	1
Richland County	3					3
Ross County	1					1
Sandusky County	1					1
Scioto County	5				4	1
Seneca County	4				1	3
Stark County	4					4
Summit County	7				2	5
Trumbull County	1				1	
Warren County	7				7	
Williams County	1				1	
Wood County	6			1	3	2
Wyandot County	11				11	
Total	407		3	5	168	231

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Wayne County	1	
White County	13	
Whitley County	1	
Total:	255	
Iowa:		
Buchanan County	4	
Cerro Gordo County	29	
Cherokee County	1	
Des Moines County	1	
Dubuque County	8	
Franklin County	2	
Harrison County	1	
Linn County	15	
Lucas County	3	
Mills County	2	
Monona County	4	
Page County	1	
Polk County	14	
Pottawattamie County	38	
Scott County	3	
Story County	2	
Wapello County	1	
Total	129	
Maine:		
Aroostook County—		
Van Buren (town)	1	
Madawaska (town)	10	
Eagle Lake (town)	8	
Penobscot County—		
Bangor	1	
Piscataquis County—		
Brownville (town)	1	
Total	21	
Mississippi:		
Adams County	1	
Alcorn County	2	
Bolivar County	33	
Carroll County	1	
Chickasaw County	1	
Choctaw County	3	
Clarke County	30	
Clay County	4	
Conhoma County	1	
Copiah County	2	
Hinds County	1	
Holmes County	4	
Jones County	2	
Lauderdale County	6	
Leflore County	14	
Harnett County	2	
Hertford County	1	
Lee County	1	
Perquimans County	6	
Pitt County	3	
Randolph County	3	
Rockingham County	9	
Rutherford County	4	
Sampson County	1	
Stanly County	3	
Surry County	2	
Wake County	2	
Wilkes County	1	
Total	132	
North Dakota:		
Cass County	8	
Grand Forks County	2	
Ramsey County	1	
Total	11	
Oregon:		
Jackson County	5	
Linn County	1	
Multnomah County	5	
Portland	20	
Total	31	
Pennsylvania:		
Allegheny County	10	
Cambria County	3	
Indiana County	1	
Mercer County	1	
Total	15	
South Carolina:		
Chesterfield County	9	
Greenville County	15	
Spartanburg County	1	
Total	25	
Wyoming:		
Carbon County	1	
Albany County	8	
Sweetwater County	12	
Laramie County	15	
Natrona County	11	
Sheridan County	2	
Total	49	

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Florida:	
Dade County—	
Miami	2
De Soto County	5
Duval County	2
Jacksonville	7
Escambia County—	
Pensacola	2
Hilsborough County—	
Tampa	2
Leon County	2
Monroe County	1
Polk County	1
Putnam County	1
Volusia County	4
Total	29
Indiana:	
Allen County	2
Clark County	7
Delaware County	2
Elkhart County	1
Hamilton County	1
Jackson County	1
Lake County	8
Marion County	1
Newton County	1
Shelby County	2
Tipton County	1
Wabash County	3
Total	30
Maine:	
Aroostook County—	
Ashland (town)	1
Cumberland County—	
Standish (town)	1
Piscataquis County—	
Dover (town)	1
Total	3
Mississippi:	
Adams County	4
Amite County	2
Attala County	2
Bolivar County	9
Calhoun County	2

Mississippi—Continued.	
Carroll County	3
Chickasaw County	1
Clay County	2
Coahoma County	1
Copiah County	1
De Soto County	2
Holmes County	1
Issaquena County	1
Jefferson County	1
Kemper County	1
Lafayette County	1
Lawrence County	4
Leake County	1
Lincoln County	3
Lowndes County	2
Neshoba County	6
Newton County	1
Pike County	5
Scott County	1
Smith County	4
Sunflower County	3
Tallahatchie County	2
Tate County	3
Tunica County	1
Union County	4
Walthall County	1
Warren County	3
Washington County	1
Wayne County	1
Winston County	3
Yalobusha County	2
Yazoo County	5
Total	90
New Jersey:	
Bergen County	1
Burlington County	1
Essex County	6
Hudson County	1
Mercer County	3
Monmouth County	2
Morris County	2
Somerset County	1
Sussex County	2
Union County	2
Warren County	3
Total	24

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Dutchess County—	
Fishkill	1
Erie County—	
Buffalo	13
Tonawanda (town)	1
Greene County—	
Catskill	1
Herkimer County—	
Little Falls	2
Frankfort	1
Ilion	1
Herkimer (town)	1
Herkimer	4
Jefferson County—	
Theresa (town)	1
Carthage	1
Lewis County—	
Harrisville	2
Turin	1
Monroe County—	
Rochester	2
Niagara County—	
Lockport	2
Oneida County—	
New Hartford	1
Ontario County—	
Canandaigua	1
Orleans County—	
Albion	3
Holley	1
Oswego County—	
Oswego	2
Rensselaer County—	
Troy	1
St. Lawrence County—	
Norwood	1
Potsdam	1
Saratoga County—	
Mechanicsville	18
Halfmoon (town)	1
Schuyler County—	
Watkins	1
Seneca County—	
Waterloo	1
Steuben County—	
Painted Post	1
Suffolk County—	
Central Islip State Hospital	1
Sullivan County—	
Liberty (town)	1
Ulster County—	
Kingston	4
Washington County—	
Whitehall	2
Wyoming County—	
Castile	3
Total	80

Guilford County	1
Jackson County	1
Johnston County	3
Jones County	6
New Hanover County	3
Onslow County	1
Robeson County	1
Rockingham County	2
Rowan County	1
Stanly County	4
Union County	1
Wake County	2
Washington County	2
Wilkes County	1
Wilson County	5
Total	36
North Dakota:	
Burleigh County	2
McHenry County	1
Stutsman County	1
Williams County	1
Total	5
Ohio:	
Ashland County	1
Ashtabula County	1
Belmont County	1
Brown County	2
Butler County	4
Clermont County	4
Canton County	1
Columbiana County	3
Crawford County	2
Cuyahoga County	4
Darke County	1
Fairfield County	1
Franklin County	3
Greene County	6
Hamilton County	1
Harrison County	5
Highland County	2
Jefferson County	2
Knox County	1
Lawrence County	12
Licking County	2
Logan County	2
Lucas County	2
Meigs County	3
Mercer County	1
Morgan County	1
Muskingum County	3
Noble County	3
Portage County	7
Scioto County	6
Seneca County	1
Stark County	1

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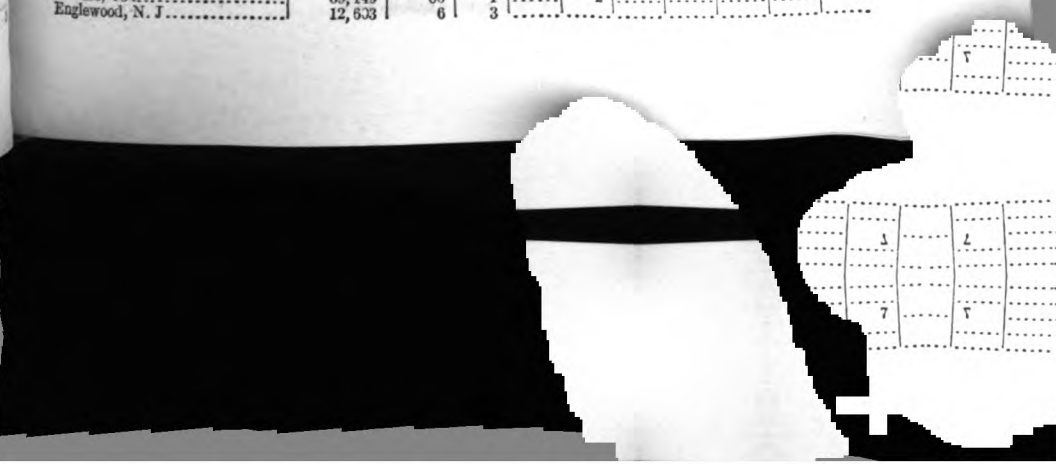
Chelsea, Mass.	40,759	18			7				1	
Chester, Pa.	48,405	23	3						3	2
Cheyenne, Wyo.	41,857		1							
Chicago, Ill.	11,320				2		1			
Chicopee, Mass.	2,547,201	903	152	16	129		65	2	289	78
Chillicothe, Ohio.	29,950	11	1						2	1
Cincinnati, Ohio.	15,625	4	2				2			
Cleveland, Ohio.	414,245	162	4	2	5		6		20	18
Clinton, Iowa.	692,259	249	43	5	4		6		18	26
Cohoes, N. Y.	27,678		3				1			
Colorado Springs, Colo.	25,292	5	1				5		1	
Columbia, S. C.	38,965	13					3		3	3
Columbus, Ohio.	35,165				2				1	
Concord, N. H.	220,135	83	1		1		3		4	7
Corpus Christi, Tex.	22,858	11								1
Council Bluffs, Iowa.	10,789	5	2							1
Covington, Ky.	31,838	9	4		2		4			
Cranston, R. I.	59,623	27	2				1		2	1
Cumberland, Md.	26,773	4	2				1			
Dallas, Tex.	26,683	13	1		31					
Danbury, Conn.	129,738	34	2	1			1		7	2
Danvers, Mass.	22,931	4								
Danville, Ill.	10,037		4							
Danville, Va.	32,969	14								
Davenport, Iowa.	20,183	11								4
Dayton, Ohio.	49,618						1			
Decatur, Ill.	128,939	40			1		1		4	3
Dedham, Mass.	41,483	10							1	
Denver, Colo.	10,618	1								
Des Moines, Iowa.	268,439	101	8	1			6			19
Detroit, Mich.	104,052						9		1	
Dover, N. H.	619,648	276	77	6	5	1	38	3	31	25
Du Bois, Pa.	13,276	6								
Dubuque, Iowa.	14,994		1		1		1			
Duluth, Minn.	40,096		5				1			
Durham, N. C.	97,077	27	7	1	1		2		3	3
East Chicago, Ind.	21,160	7								
Easthampton, Mass.	30,286	12								1
Easton, Pa.	10,656						1			
East Liverpool, Ohio.	22,941	12								
East Orange, N. J.	30,854				2					
East Providence, R. I.	43,761	15	3						1	1
Eau Claire, Wis.	18,485						2			
Elgin, Ill.	18,887				8		2			
Elizabeth, N. J.	28,562	11	3		1		1			1
El Paso, Tex.	88,839		2				2		7	
Englewood, N. J.	69,149	60	1		2					12
	12,653	6	3							



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Grand Rapids, Mich	132,861	38	1		5		3		5	
Great Falls, Mont	[1] 13,948	10			3		1		1	
Green Bay, Wis	30,017	13							2	2
Greenfield, Mass	12,251	4	2				1		1	
Greensboro, N. C	20,171	9								2
Greensburgh, Pa	15,881		3							
Greenwich, Conn	19,594						3			1
Hackensack, N. J	17,412	14	1						1	1
Hammond, Ind	27,016	8	1	1						
Harrisburg, Pa	73,276		4		1		3			
Harrison, N. J	17,345		1							
Hartford, Conn	112,851	38	6		37		9		5	
Haverhill, Mass	49,180	24	5						6	
Hazleton, Pa	28,981		2				2			
Hibbing, Minn	17,550						1			
Highland Park, Mich	33,859	9	4				1		2	
High Point, N. C	13,439								1	
Hoboken, N. J	78,324	23	12	2	2				2	2
Holyoke, Mass	66,503	15	3		1		6		3	3
Houston, Tex	116,878	38	1		6				1	3
Hudson, N. Y	12,898	4								
Hutchinson, Kans	21,461		1		4					
Independence, Mo	11,964	4			2					
Indianapolis, Ind	233,622	98	16	3	6		10		7	8
Iowa City, Iowa	11,626						2			
Ironton, Ohio	14,079	1								
Ironwood, Mich	15,095	4			1					1
Ithaca, N. Y	16,017	7					6		1	1
Jamestown, N. Y	37,431	15	3				3			2
Janesville, Wis	14,411	3								
Jersey City, N. J	312,557		25				6		13	
Johnstown, N. Y	10,678	3	2				2			
Johnstown, Pa	70,473		3		1				4	
Joplin, Mo	33,400	4							2	
Kalamazoo, Mich	50,408	19	3						2	3
Kansas City, Kans	102,096		9						2	
Kansas City, Mo	305,816	134	9		30	1	7	1	4	10
Kearny, N. J	24,325	12	1						1	
Keene, N. H	10,725	5								
Kenosha, Wis	32,833	7	7		13		3		2	
Kokomo, Ind	21,929	3	1				1			1
Lackawanna, N. Y	16,219	9	2		4		2		1	
La Crosse, Wis	31,833	18		1						1
La Fayette, Ind	21,481	6	1				1			
Lakewood, Ohio	23,813	18	1	1					4	4

[1] Population April 15, 1910.

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	3	2	1		4		2	2
	2		1		1		1	
			18		3			1
	1				3		2	
2			3	1			1	
27	4	1					4	1
7			6					2
7			3		23			1
2								
		1	1					
4	4				1			2
7							2	
10	2				1			1
3								
56	4		12		2		7	8
	1				3			
7								
7			5					
11								
110	11	2	3		30		21	8
95	7		2		13		13	15
7					3	1		
25	2		3					2
3	3	1						
	2							
2	1				1		1	
5					2			
1			1				2	
5	1				1			
11					1		2	
					2			
			5		1			
7					6			2
61	1		20		6		3	1
2	1				1			
142	55	4	3		22		34	20
9	2		2					1
40	2				3		7	3
13	1		22		5			2
			12				2	
16					1		1	2
4	1							
	3				1			
52	2		17	1	3		5	3
9	3				2			
176	11	1			3		36	26
							2	2
5	1							
11	1						6	1
2,090	340	38	32	1	123	5	312	177
14	3						4	3
					1		2	1

[1] Population April 15, 1910.

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[redacted]phia, Pa	[redacted]	726	80	8	14	1	63	1	84	26
Phillipsburg, N. J	15,879	6					1		3	
Phoenixville, Pa	11,871				6					
Pine Bluff, Ark	17,777						1			
Piqua, Ohio	14,275	3								
Pittsburgh, Pa	586,196		24		3		19		25	
Pittsfield, Mass	39,678	12								
Pittston, Pa	18,975		1							
Plainfield, N. J	24,330	11	1				1			
Plattsburg, N. Y	13,111	8	3							1
Plymouth, Mass	14,001	5								
Plymouth, Pa	19,439				15		1			
Pontiac, Mich	18,006	14	6		2					
Port Chester, N. Y	16,727	6	2				1			1
Portland, Me	64,720	16	1				5			
Portland, Oreg	308,399	64	8	1	2		3		11	5
Portsmouth, Va	40,693									2
Pottstown, Pa	16,987		6		43					
Pottsville, Pa	22,717		2		9		1		1	
Poughkeepsie, N. Y	30,786	12							1	1
Providence, R. I	259,895	103	26				8			12
Quincy, Ill	36,832	10			1		9			1
Quincy, Mass	39,022	10	2				1		6	1
Racine, Wis	47,465	10					1		2	3
Rahway, N. J	10,361	6							1	1
Raleigh, N. C	20,274	21	1		3					3
Reading, Pa	111,607		2		152					
Redlands, Cal	14,573	2					2			
Richmond, Va	158,702	61	3		2		2		3	6
Riverside, Cal	20,496	7							2	4
Roanoke, Va	46,282	14	4		7		1			1
Rochester, N. Y	264,714	68	9		2	1	16		14	3
Rockford, Ill	56,739	20	2	2	4		2		3	1
Rock Island, Ill	29,452	8								
Rocky Mount, N. C	12,673	2								
Rome, Ga	15,607								1	
Rutland, Vt	15,038	6								
Saginaw, Mich	56,409	17	2				2		1	1
St. Joseph, Mo	80,498	45	8				4	1		5
St. Louis, Mo	768,630	139	38	2	4		7		36	17
St. Paul, Minn	252,465	62	19	1	13		18	1	21	7
Salem, Mass	49,346	22	3	1			3		1	2
Salem, Oreg	21,274	6							1	
Salt Lake City, Utah	121,623	34	5	1	1					1
San Angelo, Tex	[1] 10,321	8								6
San Antonio, Tex	128,215	20			3				18	15
San Bernardino, Cal	17,616	4								1

[1] Population Apr. 15, 1910.

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Steubenville, Ohio	28,259	6	2							
Stillwater, Minn	[1] 10,198		3							
Stockton, Cal	36,209	10								1
Streator, Il	14,313	4					1	1		
Superior, Wis	47,167	10	2				4			
Syracuse, N. Y	158,559	57	5	1			13		4	2
Tacoma, Wash	117,446		1		6		15		1	
Taunton, Mass	36,610	22			6		1		1	1
Terre Haute, Ind	67,361	28								1
Tiffin, Ohio	12,962	7	1						1	
Toledo, Ohio	202,010	70	10		1		13		13	8
Topeka, Kans	49,538	27	1						1	1
Trenton, N. J	113,974	58	8	2	2				4	7
Troy, N. Y	78,094	33	3		2		6		7	5
Utica, N. Y	89,272	21	3		9				4	2
Walla Walla, Wash	26,067						1			
Waltham, Mass	31,011	7					3			
Washington, D. C	369,282	149	31	1	2		9		38	17
Waterbury, Conn	89,201	1	4		2		1			1
Watertown, Mass	15,188	3							1	
Watertown, N. Y	30,404			1			1			
Wausau, Wis	19,666	4			1		1			
Westfield, Mass	18,769	6	2	1			2			
West Hoboken, N. J	44,386	8	1				1		2	1
Wheeling, W. Va	43,657								1	2
White Plains, N. Y	23,331	7					1			1
Wichita, Kans	73,597	19			3		2		1	2
Wilkes-Barre, Pa	78,334		4		2				6	
Wilkinsburg, Pa	23,899						1		1	
Williamsport, Pa	34,123		1							
Wilmington, Del	95,369	37	8	1	1					2
Wilmington, N. C	30,400	19	1				1		1	2
Winchester, Mass	10,812	6						2		
Winona, Minn	[1] 18,583	12								
Winston-Salem, N. C	33,136	18	1						4	2
Winthrop, Mass	13,105						1			
Woburn, Mass	16,076	3		1						
Worcester, Mass	166,106	87	5	1	9		1		5	7
Yonkers, N. Y	103,066	34	6				3			4
Youngstown, Ohio	112,282	64	2	1	13		5			2
Zanesville, Ohio	31,320	11			7	1				

[1] Population Apr. 15, 1910.

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FOREIGN.

BRAZIL.

Influenza—Para.

During the month of December, 1918, 7,100 cases of influenza were reported at Para. The number of fatalities from influenza reported during this period was 103; from pneumonia 40 fatalities were reported. (Population of Para, officially estimated, 186,000.)

CANADA.

Influenza—Province of Ontario.

During the months of October, November, and December, 1918, fatal cases of influenza were reported in the Province of Ontario as follows: October, 3,015; November, 2,608; December, 1,568. During the month of January, 1919, there were reported 1,514 fatal cases, of which about 400 occurred during the three preceding months, but were not reported during those months. Of the fatalities reported for the month of January, including late returns, 279 were reported for Toronto, 72 for Hamilton, 96 for London, and 44 for Ottawa. Influenza was reported present with fatal cases in 47 localities in the Province of Ontario. (Population of the Province, about 2,523,000.)

Influenza—Vancouver.

During the two weeks ended January 18, 1919, 850 cases of influenza with 103 fatalities were reported at Vancouver, British Columbia, Canada.

CHINA.

Examination of Rats—Hongkong.

During the period from November 3 to December 28, 1918, 13,959 rats were examined at Hongkong. No plague infection was found.

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CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Diseases.	Jan. 21-31, 1919.		Remaining under treatment Jan. 31, 1919.
	New cases.	Deaths.	
Diphtheria	4		3
Leprosy			17
Malaria	29		[1] 40
Paratyphoid fever	3	1	4
Typhoid fever	10	8	32

[1] From the interior, 35.

Influenza—Habana—Regla.

During the period from January 21 to 31, 1919, 224 cases of influenza were reported at Habana and 8 cases at Regla.

DOMINICAN REPUBLIC.

Further Relative to Influenza.[1]

During the four weeks ended January 25, 1919, 1,101 cases of influenza with 92 fatalities were reported in the Dominican Republic.

GREECE.

Epidemic Cerebrospinal Meningitis—Athens.

Epidemic cerebrospinal meningitis was reported present at Athens, Greece, February 25, 1919.

FIJI ISLANDS.

Influenza.

Influenza was reported present December 3, 1918, in the Fiji Islands, Pacific Ocean, with heavy death rate.

ITALY.

Influenza—Leghorn.

Influenza was reported present at Leghorn, Italy, in October, 1918, with the greatest prevalence occurring among troops. During the period from November 4 to December 8, 1918, 997 cases with 163 fatalities were reported. During the week ended January 5, 1919, 244 cases with 25 fatalities were reported, and during the week ended January 19, 1919, 118 cases with 13 fatalities. (Population, officially estimated, 106,000.)

[1] Public Health Reports, Dec. 27, 1918, p. 2354, and Jan. 24, 1919, p. 159

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MEXICO.

Influenza—October, 1918–January, 1919.

Epidemic influenza has been stated to have entered Mexico during the first week in October, 1918, and to have spread rapidly throughout the country. At the end of January, 1919, a general decline in epidemic prevalence of influenza was reported. The total number of fatalities from the disease has been variously estimated, some estimates running as high as half a million. In the State of Chiapas one-tenth of the population is estimated to have died from the results of influenza; in the city of Tapachula, 3,000 deaths were reported in a population of 30,000. A statement published at Mexico City under date of January 2, 1919, for 25 States and the Federal district, shows the greatest reported mortality from influenza to have occurred in the State of Michoacan, viz, 48,000 (population, 991,600), and the lowest in the State of Colima, viz, 900 (population, 77,700). No estimates have been received for Campeche, Morelos, Yucatan, Lower California, or the Territory of Quintana Roo. On January 2, 1919, the epidemic was reported to be seriously prevalent in the States of Chiapas and Tabasco.

NETHERLANDS.

Typhus Fever—Rotterdam.

From January 30, 1919, to February 27, 1919, 462 cases of typhus fever with 46 fatalities were reported at Rotterdam, Netherlands.

RUSSIA.

Typhus Fever—Petrograd.

Under date of February 2, 1919, typhus fever was reported present at Petrograd with approximately 225 cases reported from date of outbreak and a daily occurrence of about 20 cases.

TONGAN ISLANDS.

Influenza.

Influenza was reported present December 3, 1918, in the Tongan Islands, Pacific Ocean, with heavy death rate.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Mar. 7, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Dec. 8–28	1,325	1,016	
Calcutta	Dec. 15–21		88	
Do	Dec. 29–Jan. 4		27	
Madras	Dec. 15–28	50	17	
Rangoon	do	6	6	
Java:				
West Java				Nov. 28–Dec. 11, 1918: Cases, 16; deaths, 17.
Batavia	Nov. 28–Dec. 11	11	6	
Philippine Islands:		6	3	
Manila	Jan. 5–11			Jan. 5–11, 1919: Cases, 135; deaths, 85.
Provinces				
Bataan	Jan. 5–11	2	2	
Batangas	do	5	1	
Bulacan	do	8	3	
Capis	do	7	3	
Cavite	do	4	3	
Ilocos Sur	do	16	5	
Iloilo	do	2	1	
Laguna	do	18	11	
Lanao	do	8	4	
Misamis	do	14	10	
Oriental Negros	do	5	3	
Pampanga	do	4	3	
Pangasinan	do	23	20	
Tayabas	do	1	1	
Zamboanga	do	18	15	
Manila	Jan. 12–18	4	1	
Provinces				Jan. 12–18, 1919: Cases, 121, deaths, 97.
Batangas	Jan. 12–18	5	7	
Bohol	do	8	4	
Bulacan	do	4	1	
Capiz	do	18	10	
Cavite	do	2	2	
Cebu	do	13	12	
Ilocos Sur	do	3	2	
Iloilo	do	13	13	
Laguna	do	12	13	
Misamis	do	9	7	
Nueva Ecija	do	3	2	
Pampanga	do	9	7	
Pangasinan	do	19	16	
Tayabas	do	2	1	
Zamboanga	do	1		

PLAGUE.

Ecuador:				
Guayaquil	Jan. 1–15	7	2	
India				Dec. 8–28, 1918: Cases, 4,731; deaths, 3,320.
Bombay	Dec. 8–28	3	2	
Calcutta	Dec. 22–28		1	
Karachi	Dec. 23–31	1	1	
Madras	Dec. 15–21	20	12	
Do	Dec. 29–Jan. 4	123	52	
Madras Presidency	Dec. 15–21	172	115	
Do	Dec. 29–Jan. 4	92	48	
Rangoon	Dec. 15–21	8	5	
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.

SMALLPOX.

Canada:			
New Brunswick—			
Campbellton	Jan. 12–18	1	
St. John	Feb. 16–22	1	
Nova Scotia—			
Halifax	Feb. 9–15	30	
Sydney	do	1	
Quebec—			
Quebec	Feb. 9–15	1	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Mar. 7, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Amoy	Dec. 8–28			Present.
Foochow	Dec. 22–28			Do.
Nanking	Dec. 29–Jan. 4			Do.
Chosen (Korea):				
Chemulpo	Dec. 1–31	13	4	
India:				
Bombay	Dec. 8–28	15	4	
Calcutta	Dec. 15–28		6	
Do	Dec. 29–Jan. 4		6	
Karachi	Dec. 15–21	8	1	
Madras	do	5	4	
Do	Dec. 29–Jan. 4	22	6	
Rangoon	Dec. 15–21	9	2	
Italy:				
Genoa	Jan. 9–15	1		
Java:				
West Java				Nov. 28–Dec. 11, 1918: Cases, 161; deaths, 42.
Batavia	Nov. 28–Dec. 11	11	7	
Mesopotamia:				
Bagdad	Dec. 7–13	7	6	
Newfoundland:				
St. Johns	Feb. 9–14	1		
Outports—				
Little Paradise	do	1		
Mercers Cove	do	1		
Philippine Islands:				
Manila	Jan. 5–11	1		Varioloid, 1.
Spain:				
Barcelona	Jan. 9–15		2	
Cadiz	Dec. 1–31		15	
Valencia	Dec. 29–Jan. 11	33	4	

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt:				
Alexandria	Jan. 1–14	12	7	
Great Britain:				
Glasgow	Jan. 5–Feb. 1	8	1	
Japan:				
Nagasaki	Jan. 13–19	1	1	
Netherlands:				
Rotterdam				Jan. 30, 1919–Feb. 7, 1919: Cases, 462; deaths, 46.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Chobo	Jan. 1–15	1		
Daule	do	1	1	
Guayaquil	do	52	30	
Naranjal	do	1	1	
Naranjito	do	1	1	
Payo (Hacienda)	do	1		

Reports Received from Dec. 28, 1918, to Feb. 28, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17–30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13–19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.

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AGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

eceived from Dec. 28, 1918, to Feb. 28, 1919—Continued.

CHOLERA—Continued.

	Date.	Cases.	Deaths.	Remarks.
.....	Aug. 18-Nov. 9....	26	15	
.....	Sept. 29-Dec. 14...	.....	152	Report for Nov. 23, 1918, missing.
.....	Oct. 5-Dec. 14.....	141	96	
.....	.....do.....	29	27	
.....	Aug. 1-31.....	5	5	
.....	.....do.....	98	71	
.....	.....do.....	110	89	
.....	Oct. 7-Dec. 22.....	75	45	
.....	Aug. 1-31.....	1	.....	
ict).....	Oct. 7-Nov. 18....	636	391	Oct. 7-21, 1918: Cases, 109; deaths, 94.
.....	Sept. 25-Oct. 16...	120	111	Sept. 25-Nov. 27, 1918: Cases, 2,883; deaths, 1,707.
.....	Oct. 2-Nov. 27....	280	142	Oct. 2-Nov. 27, 1918: Cases, 396; deaths, 227.
.....	Oct. 11-18.....	8	.....	
.....	Sept. 22-Dec. 28...	181	121	
.....	Dec. 29-Jan. 4.....	4	3	
.....	Dec. 15-21.....	1	1	Nov. 2-9, 1918: Cases, 511; deaths, 417. Nov. 17-Dec. 28, 1918: Cases, 1,203; deaths, 858. Dec. 29, 1918-Jan. 4, 1919: Cases, 88; deaths, 73.
.....	Nov. 17-Dec. 28...	38	32	
.....	Nov. 2-9.....	156	141	
.....	Nov. 17-Dec. 28...	79	65	
.....	Dec. 29-Jan. 4.....	3	2	
.....	Nov. 2-9.....	19	17	
.....	Nov. 17-Dec. 21...	12	5	
.....	Oct. 27-Nov. 2....	5	6	
.....	Nov. 17-Dec. 28...	44	30	
.....	Dec. 29-Jan. 4.....	12	10	
.....	Dec. 22-28.....	7	5	
.....	Oct. 27-Nov. 2....	38	28	
.....	Nov. 17-Dec. 21...	163	75	
.....	Dec. 29-Jan. 4.....	10	10	
.....	Dec. 15-21.....	41	20	
.....	Dec. 8-28.....	17	8	
.....	Dec. 29-Jan. 4.....	11	10	
.....	Oct. 27-Nov. 2....	9	6	
.....	Nov. 17-Dec. 21...	70	51	
.....	Oct. 27-Dec. 28....	18	11	
.....	Dec. 29-Jan. 4.....	6	3	
.....	Nov. 24-30.....	4	5	
.....	Oct. 27-Nov. 2....	6	5	
.....	Nov. 17-Dec. 28...	75	48	
.....	Nov. 2-9.....	20	8	
.....	Nov. 17-Dec. 7....	6	6	
.....	Nov. 24-Dec. 14...	4	4	
.....	Nov. 2-9.....	236	192	
.....	Nov. 17-Dec. 28...	428	313	
.....	Dec. 29-Jan. 4.....	45	37	
.....	Oct. 27-Nov. 2....	3	1	
.....	Nov. 24-30.....	16	5	
.....	Dec. 15-21.....	8	1	
.....	Nov. 17-23.....	8	4	
.....	Nov. 2-9.....	7	4	
.....	Nov. 17-Dec. 28...	54	25	
.....	Dec. 29-Jan. 4.....	1	1	
.....	Nov. 2-Dec. 28....	18	14	
.....	Dec. 8-28.....	27	19	
.....	Sept. 29-Oct. 5....	2	.....	
.....	To July 16.....	3,388	1,054	
.....	July 17-Sept. 11...	3,479	1,455	In civil and military hospitals. In military hospitals, July 5-Aug. 21, 1918: Cases, 884; deaths, 783.
.....	Sept. 1-20.....	7	6	
.....	.....do.....	25	.....	Sept. 1-20, 1918: 11 cases on s. s. Helena.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Feb. 28, 1919—Continued.

PLAGUE.

China:				
Amoy				Present.
Chungking	Dec. 1-7			Do.
Hongkong	Oct. 26-Dec. 8	1	1	
Do	Nov. 9-Dec. 28	1	2	
Nanking	Nov. 2-9			Always prevalent.
Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
Ecuador:				
Guayaquil	Nov. 1-Dec. 31	15	3	
Taura	Dec 16-31	1	1	
Egypt				Jan. 1-Nov. 21, 1918: Cases, 357; deaths, 153.
India				Sept. 23-Dec. 7, 1918: Cases, 19,548; deaths, 15,049.
Bombay	Aug. 18-Dec. 7	38	27	
Karachi	Oct. 19-26	16	16	
Madras	Dec. 8-14	3	1	
Madras Presidency	Oct. 13-Dec. 14	910	624	
Rangoon	Oct. 5-Dec. 14	76	76	
Indo-China:				
Anam	Aug. 1-31	15	10	
Cambodia	do		23	
Cochin-China	do	14	11	
Saigon	Oct. 7-Nov. 24	5	1	
Java:				
East Java				Oct. 7-Nov. 18, 1918: Cases, 78; deaths, 78.
Surabaya (district)	Oct. 7-Nov. 18	61	61	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 14; deaths, 14.
Samarang	Sept. 25-Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16-29	5	2	
Siam:				
Bangkok	Sept. 21-28	4	3	
Do	Oct. 5-12	2	2	
Venezuela:				
Caracas	Dec. 30	1		

SMALLPOX.

Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-11	1		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 8	5		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 10			Do.
Digby	do			Do.
Halifax	Dec. 7-28	10		
Do	Jan. 5-Feb. 8	67		
Middleton	Dec. 29-Jan. 4			Do.
Sydney	Jan. 5-25	2		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-Feb. 8	6		
Toronto	Feb. 2-8	1		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-25	12		
Paspebiac	do	2		
Quebec	Dec. 15-21	1		
Do	Dec. 29-Feb. 1	4		
China:				
Amoy	Oct. 13-Dec. 8			Present.
Canton	Nov. 17-23			Do.
Chungking	Nov. 10-Dec. 28			Do.
Foochow	Nov. 24-Dec. 21			Do.
Hongkong	Dec. 15-21	1	1	
Nanking	Dec. 1-28			Do.
Do	Jan. 5-11			Do.
Chosen:				
Chemulpo	Nov. 1-30	2		
Denmark:				
Copenhagen	Nov. 9-Dec. 28	12		
Do	Dec. 29-Jan. 11	8		

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UE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

ved from Dec. 28, 1918, to Feb. 28, 1919—Continued.

SMALLPOX—Continued.

	Date.	Cases.	Deaths.	Remarks.
....	Dec. 17-28.....	1	1	
....	Aug. 18-Dec. 6....	20	4	
....	Sept. 29-Dec. 14...	.....	11	Report for week ended Nov. 28, 1918, missing.
....	Sept. 29-Oct. 5....	1	1	
....	Oct. 5-Dec. 14.....	47	30	
....	Oct. 29-Dec. 14....	23	4	
....	Aug. 1-31.....	29	8	
....	.....do.....	78	40	
....	.....do.....	97	27	
....	Oct. 7-Dec. 22.....	20	5	
....	Aug. 1-31.....	5	.....	
....	Oct. 26-Dec. 28....	186	46	
....	Dec. 29-Jan. 4.....	37	3	
....	.....	.....	.....	Oct. 7-Nov. 27, 1918: Cases, 21.
....	Oct. 7-Nov. 18....	15	.....	
....	.....	.....	.....	Sept. 25-Nov. 27, 1918: Cases, 164.
....	Oct. 2-Nov. 27....	174	144	Oct. 2-Nov. 27, 1918: Cases, 648; deaths, 221.
....	Oct. 11-Nov. 29...	281	75	
....	Nov. 24-30.....	1	.....	
....	Sept. 22-Dec. 28...	23	.....	
....	Dec. 29-Jan. 25....	8	.....	
....	Dec. 6-20.....	4	.....	
....	Dec. 28-Feb. 7....	5	.....	
....	.....do.....	4	.....	
....	Dec. 14-20.....	2	.....	
....	Jan. 11-17.....	6	.....	
....	Dec. 21-27.....	1	.....	
....	Jan. 26-31.....	1	.....	
....	Dec. 7-13.....	3	.....	
....	.....do.....	4	.....	
....	Dec. 14-20.....	1	.....	
....	Jan. 26-31.....	3	.....	
....	Feb. 1-7.....	1	.....	
....	Jan. 18-24.....	1	.....	
....	Feb. 1-7.....	15	.....	
....	.....do.....	.....	.....	Present.
....	.....do.....	40	.....	Bay of Islands.
....	Dec. 7-13.....	4	.....	
....	Jan. 11-17.....	6	.....	Feb. 7, 1919: Present.
....	Dec. 7-13.....	60	.....	Placentia Bay.
....	Feb. 1-7.....	11	.....	
....	Jan. 18-24.....	2	.....	
....	.....	.....	.....	Aug. - Dec. 31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1-25, 1919: cases, 28.
....	Dec. 15-31.....	1	.....	
....	Dec. 29-Jan. 25...	7	.....	
....	Nov. 2-9.....	2	2	
....	Dec. 29-Jan. 4.....	1	1	Varioloid, 1.
....	Nov. 16-Dec. 28...	843	.....	
....	.....	.....	.....	July 1-Oct. 31, 1918: 45 fatal cases.
....	Nov. 1-3.....	4	.....	
....	Oct. 1-31.....	.....	3	
....	Sept. 1-Oct. 31....	.....	153	
....	Nov. 1-30.....	.....	2	
....	Nov. 10-Dec. 21...	40	9	
....	Oct. 6-12.....	1	.....	
....	Aug. 1-30.....	1	.....	
....	Aug. 1-Oct. 31....	12	.....	Nov. 1-30, 1918: Cases, 1.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Feb. 28, 1919—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers	Nov. 1-30	1		
Austria-Hungary:				
Hungary	Sept. 2-8	2		
Brazil:				
Ceara	Sept. 14-21	1		
China:				
Antung	Dec. 2-15	2		
Do	Jan. 6-12		1	
Columbia:				
Barranquilla	Nov. 8-Dec. 28		3	
Do	Jan. 19-25	1		
Egypt:				
Alexandria	Oct. 14-Dec. 31	85	36	
Germany:				
Breslau	Sept. 29-Oct. 19	12	8	
Königsberg	do	3	1	
Mostolten	do	7	2	District of Allenstein.
Great Britain:				
Glasgow	Dec. 22-28	5		
Greece:				
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-Jan. 4		25	
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-Jan. 5	4		
Java:				
East Java				Oct. 7-21, 1918: Cases, 5.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 8.
West Java				Oct. 2-23: Cases, 31; deaths, 6.
Batavia	Oct. 2-23	15	4	
Mesopotamia:				
Bagdad	Oct. 5-11	1		
Mexico:				
Guadalajara	Nov. 1-30	2		
Mexico City	Sept. 22-Dec 28	434		
Do	Dec. 29-Jan. 25	128		
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 15	23		
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Pernambuco	Oct. 1-Nov. 30	2	1	
Ecuador:				
Babahoyo	Nov. 1-30	1		
Duran	Nov. 1-Dec. 31	3	2	
Guayaquil	do	163	87	
Milagro	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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C HEALTH REPORTS

MARCH 14, 1919 No. 11

INFLUENZA IN MARYLAND.

NARY STATISTICS OF CERTAIN LOCALITIES.

on, and EDGAR SYDENSTRICKER, Statistician, United States Public Health Service.

acts that prior to the recent epidemic reports of t required in most sections of the United States, of all infectious diseases are usually incomplete in hat during the influenza epidemic physicians were n urgent relief work, the morbidity reports received l channels furnished no reliable index of the prev- ase.

ese facts, the United States Public Health Service, nce of the first wave of the epidemic, organized n a number of localities for the purpose of ascer- tely as possible the proportion of the population ta collected in these surveys, which have been made re now in the process of compilation; but, in the n results of the surveys made in Maryland are reliminary compilations made during the progress

While these preliminary compilations are known ertain errors which may be eliminated in the final errors are not sufficient to be of material significance, that the data are of sufficient interest to warrant he preliminary figures at this time.

es in which surveys were made in Maryland are:

in 1917	594,637
on in 1917	28,686
	[1] 1,553
in 1917	11,225
	[1] 6,690

n Frederick, Washington, and Wicomico Counties.

are widely separated in the State, Cumberland being in the extreme northwestern part, Frederick

ation in 1910. No census estimate has been made for 1917.

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in the central part, and Salisbury in the southeastern part o
State.

In each of these localities a number of areas were selecte
house-to-house canvass. The size of these areas was roughly
so as to include approximately the same number of persons in
the selection of the areas within a town or city being made so
give a fairly uniform geographic distribution. Enumerators
employed to visit every house in the selected areas, and to
inquiries of the housewife or other responsible member of the
hold as to the sex and age of each member, the date of onse
duration of each case of influenza or pneumonia, and the d
each death from influenza or pneumonia.[1]

Thus the sex and age of every person in the population canv
as well as persons affected by the disease, were ascertained.
data obviously are crude to a certain degree because of the foll
conditions: (1) The canvass was made some time after the
cases occurred, and the dates of onset were not accurately re
for a small proportion of the cases; (2) the families' statements
diagnosis were accepted; (3) the enumerators were not p
especially trained in this work, although they were carefully se
for intelligence and reliability. It was believed, however, t
sufficiently large mass of data would reduce the errors arising
faulty memory on the part of some informants, and the inq
were sufficiently simple to permit even untrained persons to
the data with detailed written instructions and under
supervision.

In inquiring as to the type or nature of illness, the enume
were instructed to ask which members of a family had infl
"flu" or "grippe," since August 1, 1918, and to record ca
influenza or pneumonia as they were stated by the inform
Persons who were said to have been only "feeling badly,"
having a "cold," were recorded as "doubtful" cases. All such
lasting not less than three days, and of such severity as to c
the patient to bed for the whole of one day, however, were c
as influenza unless otherwise diagnosed by the attending phy
Cases of illness if definitely stated to be due to some other
than influenza, pneumonia, or colds were not recorded.
inquiries of this character can not be regarded as accurate diag
it is believed that such inquiries, made quite simply and cove
very definite epidemic period, afford a fairly accurate idea
incidence of the disease among representative groups of pe
The preliminary compilations appear to indicate quite clearly

[1] Certain other inquiries were made, but the tabulations of the data from these inquiries hav
been completed.

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l as influenza and pneumonia and as "doubtful" ecorded in a great majority of instances. This be noted, is most strikingly seen in the tables d where cases classified as influenza, pneumonia, how almost identical chronology and where the are shown to constitute less than 10 per cent of

cases of influenza and deaths from influenza and pneumonia (all populations canvassed in various localities in Maryland.

	Dates of canvass, 1918.	Total number of persons included in canvass.	Number of cases of influenza.	Number of deaths from influenza and pneumonia (all forms).
.....	Nov. 20-Dec. 15.....	46,535	13,037	243
ltimore.....	Nov. 27-Dec. 15.....	12,759	5,169	87
.....	Nov. 20-Dec. 10.....	33,776	7,868	156
.....	Dec. 10-12.....	1,735	796	9
.....	Nov. 27-30.....	2,420	777	9
.....	Dec. 1-6.....	5,234	2,147	38
.....	Dec. 4-11.....	1,840	1,093	22
.....	Dec. 1-15.....	1,530	356	9

ence rates and death rates per 1,000 persons, and fatality rates influenza and pneumonia (all forms) among the populations of ious localities in Maryland.

Locality.	Case incidence rate per 1,000.	Death rate per 1,000.	Case fatality rate per 100.
.....	280.2	5.2	1.9
ltimore.....	405.1	6.8	1.7
.....	232.9	4.6	2.0
.....	459.2	5.2	1.1
.....	321.1	3.7	1.2
.....	410.2	7.3	1.8
.....	594.0	11.9	2.1
.....	323.8	5.9	2.5

own for each locality in Maryland in which a survey tes on which the survey was made, the population nvass and the number of cases and the number of among the population canvassed. In all, 46,535 assed in Maryland, of whom 33,776 were in the 32 elected in Baltimore city.

the case incidence per 1,000 persons, the death a and pneumonia per 1,000 persons and the fatality among the populations canvassed in the different be noted that a considerable variation in rates

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is shown. Taking the respective rates in Baltimore as "100" rates for the various localities may be expressed thus:

	Case rate per 1,000.	Death rate per 1,000.
Baltimore	100	100
Salisbury	192	113
Frederick	138	80
Cumberland	176	139
Lonaconing	255	259
Three rural districts	139	128

It will be noted that while the case rate was lower in Bal than in any other locality, and that the death rate was lo Baltimore than in any other locality save one, the fatality ra higher in Baltimore than in any of the other localities except small town of Lonaconing and the three rural districts. I connection it should be stated that the three rural districts small to afford an accurate indication of the incidence or rates in rural communities. It is hoped that the data fo districts in Maryland can be supplemented by further surveys

In Table III the illnesses which were recorded are classified ing to the type or kind as they were reported, namely: Infl pneumonia, or "doubtful."

In Tables IV and V the numbers of cases are classified by re date of onset. Table IV shows the number of cases of all classified by date of onset as reported in the canvasses of Balt Cumberland, Lonaconing, Frederick, and Salisbury. It is no posed at the present time to attempt an analysis of these dat it should be pointed out that some marked irregularities in the which the plotting of them shows evidently result from faulty re tions by informants of the dates of onset. The number of cases b of reported onset for the areas canvassed in Baltimore duri period September 6 to November 22 are plotted in figure 1. be noted that a considerable degree of irregularity is shown line representing the number of cases by dates of onset as a reported to the enumerators; the fact that sharp peaks are for October 1, October 10, and October 15, suggests that the re dates of onset grouped themselves around certain even dates b of a probable tendency for informants to recall or state dates i rately. A closer examination of the graph will show that was a more or less well-defined periodicity of 5-day interv these dates throughout the period, probably for the same r In order to correct irregularities arising from erroneous stat of this nature, a moving five-day average was computed indicated in the figure by the broken-line graph.

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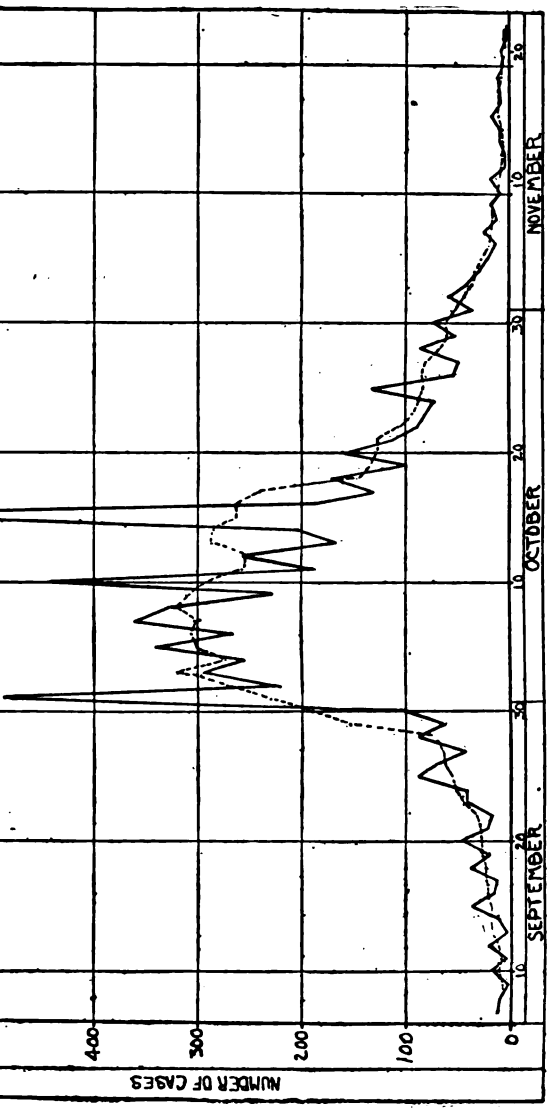

FIG. 1.—Number of cases of influenza occurring between September 6 and November 22, 1918, among the population of areas canvassed in Baltimore, by reported date of onset. The continuous line represents the number of cases whose onset occurred on the days as actually reported. The broken line is a smoothed line computed by means of a five-day moving average.

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[1] Includes cases of mild type and brief duration in which a definite diagnosis was not reported by informant. (See p 492.)

[2] Including only cases for which information as to "type" was obtained.

TABLE IV.—*Number of cases of influenza occurring among populations canvassed in specified localities in Maryland, classified by reported date of onset.*[1]

	Baltimore.[2]	Cumberland.	Lonaconing.	Frederick.	Salisbury.
Population included in canvass...	33,776	5,234	1,840	2,420	1,735
DATES.					
Sept. 1	8	6	3		
2	1	3	2		
3	7			2	
4	18		1	2	
5	3		3		
6	5	2	3		
7	12		2		
8	9	4	1		
9	2	2	1		
10	17	3	2	1	
11	4	4	1		
12	21	2	3		
13	4	4			1
14	11		1	1	
15	37	4	3		4
16	14	8	1	4	1
17	13	6	1	1	1
18	37	4	2		
19	17	3			
20	43	11	9		3
21	21	5	3		2

[1] Exclusive of 328 cases, the exact dates of onset of which were not known, as follows: Baltimore, 252 cases; Cumberland, 10 cases in September and 4 in October; Lonaconing, 4 cases in October; Frederick, 3 cases in September, 7 in October, and 1 in November; Salisbury, 1 case in September and 8 cases in October.

[2] The following number of cases were stated to have had their onsets prior to Sept. 1, 1918, in Baltimore: July 4, 1; July 9, 1; July 10, 1; July 11, 1; July 12, 1; Aug. 1, 1; Aug. 9, 1; Aug. 10, 2; Aug. 25, 2; Aug. 27, 1; Aug. 28, 3; Aug. 29, 1; and Aug. 30, 2.

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15	628	135	26	[illegible]	[illegible]
16	182	34	6	31	14
17	131	29	4	14	11
18	172	44	14	29	18
19	109	24	2	9	9
20	161	42	12	17	23
21	112	12	6	13	11
22	90	18	2	18	7
23	80	26	1	29	7
24	75	12	2	9	3
25	135	19	8	27	4
26	57	11	1	10	12
27	50	12	4	5	6
28	83	14	1	18	4
29	55	7	.....	7	5
30	73	4	3	12	7
Nov. 31	34	3	5	2	2
1	60	25	2	9	3
2	41	3	1	1	2
3	29	6	3	6	.....
4	22	5	2	3	3
5	14	2	3	3	.....
6	24	3	1	5	.....
7	13	10	.....	3	1
8	14	6	.....	5	1
9	10	4	1	2	.....
10	19	7	1	.....	1
11	5	6	.....	5	4
12	5	4	2	.....	1
13	9	2	.....	4	3
14	10	1	.....	1	1
15	17	3	1	.....	.....
16	10	2	.....	.....	.....
17	10	1	.....	.....	.....
18	12	6	.....	1	1
19	7	4	.....	1	.....
20	10	3	2	1	2
21	3	4	1	7	3
22	2	.....	1	6	2
23	4	2	.....	1	.....
24	5	1	.....	3	2
25	10	.....	1	6	1
26	5	1	.....	4	2
27	6	2	1	10	.....
28	3	4	4	3	.....
29	6	1	.....	.....	1
30	1	2	.....	.....	1

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	19	[redacted]				
	20					
	21					
	22					
	23					
	24					
	25					
	26					
	27					
	28					
	29					
	30	80	13	14	107	----
Oct.	1	405	40	36	481	----
	2	192	16	17	225	----
	3	243	18	33	294	3
	4	204	19	32	255	----
	5	280	27	30	337	3
	6	229	18	13	260	5
	7	304	19	37	360	5
	8	265	24	38	327	1
	9	196	17	15	228	10
	10	372	27	44	443	3
	11	158	12	16	186	13
	12	222	16	26	264	8
	13	141	10	13	164	4
	14	172	6	27	205	5
	15	553	25	50	628	10
	16	148	5	29	182	5
	17	95	11	25	131	7
	18	144	7	21	172	5
	19	85	5	10	100	3
	20	143	5	13	161	7
	21	87	10	15	112	3
	22	73	8	9	90	2
	23	70	4	6	80	5
	24	62	8	5	75	1
	25	116	2	17	135	2
	26	44	6	7	57	2
	27	38	2	10	50	5
	28	60	10	13	83	2
	29	45	2	8	55	4
	30	60	2	11	73	----
	31	27	4	3	34	----
Nov.	1	51	4	5	60	2
	2	34	2	5	41	1
	3	22	2	5	29	1
	4	16	4	2	22	1
	5	11	2	1	14	----
	6	18	1	5	24	1
	7	11	----	2	13	2
	8	10	1	3	14	1
	9	8	2	----	10	----
	10	13	2	4	19	1

[1] Includes cases of mild type and brief duration in which a definite diagnosis was not reported by informant. See p. 492.

[2] Exclusive of 252 cases, the exact dates of onset of which were not known, and 1 death as follows: 15 cases influenza and 5 doubtful in September; 180 cases influenza, 3 pneumonia, and 36 doubtful, and 1 death in October; 5 cases influenza and 8 doubtful in November.

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Age.	Both sexes.			Males.			Females.		
	Number of persons.	Number of cases.	Number of deaths.	Number of persons.	Number of cases.	Number of deaths.	Number of persons.	Number of cases.	Number of deaths.
ALL LOCALITIES.									
Under 1	944	192	13	451	86	4	493	106	9
Under 5	4,576	1,365	43	2,281	688	14	2,295	677	29
5–9	4,355	1,720	8	2,192	856	4	2,163	864	4
10–14	4,141	1,528	10	2,017	715	3	2,124	813	7
15–19	4,134	1,452	16	1,927	631	8	2,207	821	8
20–24	3,785	1,193	28	1,361	373	12	2,424	820	16
25–29	3,793	1,308	38	1,540	517	25	2,253	791	13
30–34	3,608	1,162	28	1,638	540	19	1,970	622	9
35–39	3,489	930	23	1,674	440	13	1,815	490	10
40–44	2,905	629	12	1,431	322	9	1,474	307	3
45–49	2,638	507	4	1,272	224	3	1,366	283	1
50–54	2,249	367	4	1,085	170	3	1,164	197	1
55–59	1,526	222	4	690	97	2	836	125	2
60–64	1,326	183	6	650	72	.....	676	111	6
65–69	972	127	6	460	57	3	512	70	3
70–74	610	59	5	254	26	1	356	33	4
75 and over	599	44	2	244	22	2	355	22	.....
Unknown	1,829	241	6	847	110	2	982	131	4
All ages	46,535	13,037	243	21,563	5,860	123	24,972	7,177	120
BALTIMORE.									
Under 1	669	103	5	323	45	1	346	58	4
Under 5	3,263	822	24	1,659	422	7	1,604	400	17
5–9	3,047	1,067	6	1,540	545	3	1,507	522	3
10–14	2,861	885	5	1,402	415	1	1,459	470	4
15–19	2,874	815	11	1,329	344	5	1,545	471	6
20–24	2,824	730	17	985	217	7	1,839	513	10
25–29	2,863	859	29	1,154	333	19	1,709	526	10
30–34	2,775	757	19	1,275	355	13	1,500	402	6
35–39	2,495	537	10	1,229	246	5	1,266	291	5
40–44	2,087	366	8	1,018	184	6	1,069	182	2
45–49	1,910	287	2	916	118	2	994	169	.....
50–54	1,644	208	2	789	95	1	855	113	1

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Under 1	6.8	4.9	9.0
Under 5	3.2	2.9	3.5
5–9	.6	.6	.4
10–14	.7	.6	.8
15–19	1.1	1.3	.8
20–24	2.4	2.3	2.4
25–29	2.0	3.4	2.0
30–34	2.4	2.5	2.2
35–39	2.5	1.9	3.3
40–44	1.9	2.2	1.5
45–49	.8	.7	.9
50–54	1.1	1.0	1.3
55–59	1.8	2.3	1.1
60–64	3.3	4.3	1.5
65–69	4.7	7.4	1.7
70–74	8.5	12.5	3.7
75 and over	4.5	4.6	4.5
Unknown	2.5	3.0	1.3
All ages	1.9	2.0	1.7

TABLE VIII.—*Case rate and death rate from influenza and pneumonia (all forms) per 1,000 male and female of different ages canvassed in certain localities in Maryland.*

Age period.	Case rate.		Death rate.		Case fatality rate.	
	Male.	Female.	Male.	Female.	Male.	Female.
Under 1	190.7	215.0	8.9	18.3	4.7	8.5
Under 5	301.6	295.0	6.1	12.7	2.0	4.3
5– 9	390.5	399.5	1.8	1.9	.5	.5
10–14	354.5	382.8	1.5	3.3	.4	.9
15–19	327.5	372.0	4.2	3.7	1.3	1.0
20–24	273.8	338.3	8.8	6.6	3.2	2.0
25–29	335.8	351.1	16.2	5.8	4.8	1.6
30–34	329.7	315.7	11.6	4.6	3.5	1.4
35–39	262.8	270.0	7.8	5.8	3.0	2.0
40–44	225.0	208.3	6.3	2.0	2.8	1.0
45–49	176.1	207.2	2.4	.7	1.3	.4
50–54	156.7	169.3	2.8	.9	1.8	.5
55–59	140.5	149.5	2.9	2.4	2.1	1.6
60–64	110.8	164.3	.....	8.9	.....	5.4
65–69	123.9	136.7	6.5	5.9	5.3	4.3
70–74	102.4	92.7	3.9	11.2	3.8	12.1
75 and over	90.2	62.0	8.2	.....	9.1	.....
Unknown	129.9	133.4	2.4	4.1	1.8	3.1
All ages	271.7	287.1	5.7	4.8	2.1	1.7

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phases of the work is fixed by official regulation. This provides that 10 per cent shall be devoted to administration, 50 per cent to treatment, 20 per cent each to repressive measures and to educational measures.

Sample budget, allotment $30,000.

Activity or project.	Administration, 10 per cent.	Treatment, 50 per cent.	Repression, 20 per cent.	Education, 20 per cent.	Total, 100 per cent.
Salary of State venereal-disease officer	$1,500	.....	.....	.....	$1,500
Salaries of employees engaged in venereal-disease work	840	.....	.....	.....	840
Travel expense accounts	360	.....	.....	.....	360
Clerical hire	200	.....	.....	.....	200
All other expenses	100	.....	.....	.....	100
Salaries of physician and hospital attendants actually engaged in treatment of venereal-disease cases	.....	$3,000	.....	.....	3,000
Cost of arsphenamine and other remedies	.....	4,000	.....	.....	4,000
Equipment of clinic	.....	1,500	.....	.....	1,500
Capital cost of detention hospital	.....	3,500	.....	.....	3,500
Maintenance of same	.....	2,500	.....	.....	2,500
Incidental expenses	.....	500	.....	.....	500
Expenses incurred in prosecuting doctors and others who fail to report venereal-disease cases	.....	.....	$2,000	.....	2,000
Salaries of investigators securing information	.....	.....	2,000	.....	2,000
Agents cooperating in law enforcements	.....	.....	2,000	.....	2,000
Expenses of printing and distributing printed matter not furnished from Washington; preparation of photos, exhibits, and other educational material; expenses of lecture services	.....	.....	.....	$6,000	6,000
Total	3,000	15,000	6,000	6,000	30,000

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City.	Population July 1, 1918, estimated.	Deaths from—		Deaths from influenza and pneumonia (all forms.)		Excess deaths [1] from all causes.		For comparison.[2] 1917 deaths.
		Influenza.	Pneumonia (all forms).	Number.	Number per 1,000 population.	Number.	Number per 1,000 population.	
Albany, N. Y.	112,565	570	178	748	6.6	534	4.7	119
Baltimore, Md.	[3] 669,981	1,956	3,006	4,962	7.4	4,118	6.1	853
Boston, Mass.	785,245	4,711	1,472	6,183	7.9	5,107	6.5	942
Buffalo, N. Y.	473,229	2,172	903	3,075	6.5	2,766	5.8	465
Cambridge, Mass.	111,432	501	197	698	6.3	661	5.9	103
Chicago, Ill.	2,596,681	7,878	5,298	13,176	5.1	9,956	3.8	2,557
Cincinnati, Ohio.	418,022	1,897	366	2,263	5.4	1,670	4.0	418
Cleveland, Ohio.	810,306	3,054	1,351	4,405	5.4	3,254	4.0	787
Columbus, Ohio.	225,296	726	212	938	4.2	710	3.2	237
Dayton, Ohio.	130,655	527	221	748	5.7	460	3.5	142
Fall River, Mass.	128,392	766	136	902	7.0	749	5.8	167
Grand Rapids, Mich.	135,450	96	248	344	2.5	206	1.5	62
Los Angeles, Calif.	568,495	2,636	557	3,193	5.6	2,968	5.2	304
Louisville, Ky.	242,707	150	1,056	1,206	5.0	869	3.6	290
Lowell, Mass.	109,081	174	521	695	6.4	554	5.1	117
Milwaukee, Wis.	453,481	339	1,247	1,586	3.5	1,333	2.9	403
Minneapolis, Minn.	383,442	1,099	194	1,293	3.4	1,023	2.7	266
Nashville, Tenn.	119,215	640	254	894	7.5	928	7.8	144
New Haven, Conn.	154,865	914	227	1,141	7.4	860	5.6	206
New Orleans, La.	382,273	2,199	1,114	3,313	8.7	2,767	7.2	431
New York, N. Y.	5,215,879	15,449	16,511	31,960	6.1	24,329	4.7	6,505
Oakland, Calif.	214,206	975	259	1,234	5.8	1,268	5.9	119
Philadelphia, Pa.	1,761,371	8,807	6,759	15,566	8.8	12,790	7.3	2,394
Pittsburgh, Pa.	593,303	2,545	3,153	5,698	9.6	4,743	8.0	1,333
Providence, R. I.	263,613	1,091	531	1,622	6.2	1,389	5.3	288
Rochester, N. Y.	264,856	1,002	272	1,274	4.8	703	2.7	226
St. Louis, Mo.	779,951	2,188	1,425	3,613	4.6	2,323	3.0	961
St. Paul, Minn.	257,699	894	197	1,091	4.2	852	3.3	158
San Francisco, Calif.	478,530	3,192	593	3,785	7.9	3,586	7.5	360
Toledo, Ohio.	262,234	567	318	885	3.4	561	2.1	170
Washington, D. C.	401,681	2,294	822	3,116	7.8	2,637	6.6	422
Total.	19,503,836	72,009	49,598	121,607	6.2	96,674	5.0	21,949

[1] Excess deaths means the number of deaths from all causes in excess of the number which would have occurred had the 1917 death rates for the corresponding months prevailed.

[2] Number of deaths from influenza and pneumonia (all forms) in January, February, September, October, November, and December, 1917.

[3] Large annexation Jan. 1, 1919; population estimated as of July 1, 1919.

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DEATHS DURING WEEK ENDED MARCH 1, 1919, IN CITI

The following table shows the registered deaths from all cause
from pneumonia (all forms) and influenza combined, in certain
cities of the United States during the week ended March 1,
The annual death rates per 1,000 population for the week a
the corresponding week of previous years are also shown.

The data are taken from the Weekly Health Index, March 4,
issued by the Bureau of the Census, Department of Commerce.
populations used in computing the rates are estimated by the
of the Census as of July 1, 1918.

*Registered deaths and annual death rates per 1,000 population in certain large cit
United States, week ended Mar. 1, 1919—Deaths from all causes, and from pn
(all forms) and influenza combined.*

City.	Population, July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza monia (a
					Number of deaths.
Albany, N. Y.	112,565	44	20.4	C 21.8	12
Atlanta, Ga.	201,732	72	18.6	C 19.1	.....
Baltimore, Md.	[2] 669,981	272	21.2	A 20.2	66
Birmingham, Ala.	197,670	74	19.5	A 18.7	.....
Boston, Mass.	785,245	279	18.5	A 19.1	70
Buffalo, N. Y.	473,229	195	21.5	C 17.2	44
Cambridge, Mass.	111,432	27	12.6	A 16.1	2
Chicago, Ill.	2,596,681	867	17.4	A 17.4	230
Cincinnati, Ohio.	418,022	214	26.7	C 19.2	90
Cleveland, Ohio.	810,308	279	18.7	C 17.5	94
Columbus, Ohio.	225,296	86	19.9	C 13.9	27
Dayton, Ohio.	130,655	52	20.8	C 14.8	16
Denver, Colo.	.....	96	.....	.....	.....
Fall River, Mass.	128,392	31	12.6	C 15.8	13
Grand Rapids, Mich.	137,450	35	13.5	C 15.0	.....
Indianapolis, Ind.	289,577	114	20.6	C 18.4	.....
Kansas City, Mo.	313,785	165	27.4	C 18.9	55
Los Angeles, Calif.	568,495	147	13.5	A 14.6	14
Louisville, Ky.	242,707	116	24.9	C 25.1	34
Lowell, Mass.	109,081	52	24.9	A 20.7	13
Memphis, Tenn.	154,759	74	24.9	C 27.6	13
Milwaukee, Wis.	453,481	94	10.8	A 14.4	.....
Minneapolis, Minn.	383,142	107	14.6	C 12.1	.....
Nashville, Tenn.	119,215	61	26.7	C 19.7	19
Newark, N. J.	428,684	163	19.8	C 19.9	54
New Haven, Conn.	151,865	49	16.5	C 21.9	.....
New Orleans, La.	342,273	163	22.2	A 22.1	39
New York, N. Y.	5,215,879	2,158	21.6	C 17.9	904
Oakland, Calif.	214,206	47	11.4	A 11.7	.....
Omaha, Nebr.	181,264	40	11.6	C 12.4	.....
Philadelphia, Pa.	1,761,371	682	20.2	[3] 18.4	297
Pittsburgh, Pa.	593,313	287	25.2	C 19.5	134
Portland, Oreg.	.....	70	.....	.....	7
Providence, R. I.	263,613	93	18.4	C 17.0	21
Richmond, Va.	160,719	60	19.5	C 23.4	10
Rochester, N. Y.	264,856	79	15.6	C 16.5	7
St. Louis, Mo.	779,951	257	17.2	C 17.6	61
St. Paul, Minn.	257,699	52	10.5	C 9.3	.....
San Francisco, Calif.	478,530	182	19.8	C 18.4	21
Seattle, Wash.	.....	71	.....	.....	12
Spokane, Wash.	.....	19	.....	.....	.....
Syracuse, N. Y.	161,404	67	21.6	C 16.2	.....
Toledo, Ohio.	262,234	69	13.7	A 15.1	14
Washington, D. C.	401,681	163	21.2	A 20.5	35
Worcester, Mass.	173,650	60	18.0	C 15.9	8

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for sponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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DEMIC INFLUENZA IN GREECE.

lth Service is indebted to the American consul , Greece, for the following very instructive report idemic of influenza in that city last fall. This by Dr. T. G. Filtzos, inspector for the American under date of January 16, 1919.

ditions which cause the influenza virus to take on e are as yet not known, but in this case the epi- ly caused by the abnormal conditions of living, hysical, the lack of food, and overwork, all being var.

rance of influenza in Greece occurred last summer, May; the symptoms were but slight and the people suffered for three or four days with fever, accom- s symptoms. It was called at the time 'Spanish untry where it first made its appearance.

th of September the epidemic became worse and ble rise in the mortality. Many cases complicated umonia appeared then all over the country, and haps 50 per cent were fatal. The most ordinary th a general cyanosis, which spread the rumor of lague and cholera. The people were alarmed and orities were constrained to carefully go into the nstructions as to the nature of the disease and the be taken to avoid contamination and complica- ese measures were the closing of schools, both e, and of nocturnal theaters and cinemas. People ed to avoid the overcrowded places and trams and ith first symptoms of malaise; they were further ughing and sneezing were the means of spreading person to person. Owing to these prophylactic r to the lapse of time, the disease began to decrease e of December, or rather began to lose its severe appears from the figures of deaths given below.

atistics of Athens and Piraeus for the following llows:

	Deaths from influenza.	Total deaths.
	108	613
	115	771
	605	1,430
	670	1,515
	229	771

suffered most and had most of the fatal cases were . The symptomatic treatment has generally been the beginning of the disease most of the doctors of corrosive sublimate in solution, but very soon owing to rather bad effects. The colloidal metals

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either prepared locally as colloidal silver or as electrargol by cutaneous or intravenous injections, if there are no complica have also been tried, and it would appear that this treatment very good results. Vaccine treatment was not tried here at all.

COMMON TOWELS.

COURT CONSTRUES LAWS PROHIBITING USE IN PUBLIC PLA

The need for exercising great care in drawing up legislation illustrated by a recent decision [1] of the Supreme Court of App Virginia. Two acts [2] passed by the Virginia Legislature in 191 hibited the placing, keeping, or use of common towels in any lavatory. The accused was the manager of an office building, was rented to different individuals. On each floor was a la which was kept locked and was only for the use of the tenants building. In a prosecution for an alleged violation of th referred to the court decided in favor of the accused, holdin the lavatories were not public lavatories.

The court said:

> The gravamen of the offense is that the lavatory in which the towel is used mon shall be a public lavatory, which can not be affirmed of lavatories inst an office building owned by a private individual for the convenience of te the building, which are kept locked so that no one can enter them except te the building, which tenants were furnished with keys by the accused. A lavatory, on the other hand, is one that is open to all who may choose to us for example, lavatories in railway trains or steamboats, which are provided a open for the use and convenience of all of the public who travel thereon, or i ings to which the public generally have a right to resort, and which are e with open lavatories for their use.

EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

Telegraphic reports for the week ended March 8, 1919, in little change in the prevalence of influenza in the United State

The officer in charge of the civil sanitary zone around Zachary Taylor reports 1,118 cases of influenza during the 761 of which were in Louisville, Ky. (See p. 519.) Duri week ended March 1, 784 cases were reported from this zone.

As compared with the preceding week, increases in the num cases were reported by the State health officers of Arkansas, Cali Iowa, Kansas, Louisiana, Maine, and Vermont. Decreases reported from Alabama, Connecticut, Illinois, New Jersey, Carolina, Oregon, and Virginia. (See p. 515.)

[1] Irvine v. Commonwealth, 97 S. E., 769.
[2] Reprint 406 from Pub. Health Repts., p. 201, chs. 160, 278.

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VALENCE OF DISEASE.

State or local, can effectively prevent or control disease without hen, where, and under what conditions cases are occurring.

UNITED STATES.

NT ZONES—CASES REPORTED WEEK ENDED MAR. 8.

Y DISTRICT, S. C.

	Cases.
	9
	1

ZONE, MASS.

	1
	1
	2
	5
	15

NE, N. J.

	1
	1

ONE, IOWA.

s	1
	5
	3
	5
	2
	14
	3
	2
	1

ZONE, ARK.

	1
	3
	1
	2
	2
	1
	1
	1
	1
	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

	Cases.
Chicken pox	1
Influenza	8
Measles	20
Mumps	1
Pneumonia	5

CAMP FUNSTON ZONE, KANS.

Influenza:	
Cleburne	5
Junction City	10
Manhattan	36
Manhattan (rural)	29
Pottawatomie County	7
Mumps:	
Junction City	2
Manhattan	8
Pneumonia:	
Junction City	5
Manhattan	2
Scarlet fever:	
Junction City	11
Manhattan	11
Smallpox:	
Cleburne	4

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Columbus:	
Gonorrhea	6
Influenza	3
Measles	8
Mumps	1
Pneumonia	4
Scarlet fever	1
Smallpox	4
Syphilis	3
Whooping cough	2
Girard:	
Pneumonia	1
Syphilis	1
Muscogee County:	
Gonorrhea	1
Influenza	3
Measles	1
Pneumonia	1
Smallpox	3

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CAMP GORDON ZONE, GA.

Atlanta:	Cases.
Chancroid	1
Chicken pox	4
Gonorrhea	14
Influenza	9
Measles	8
Mumps	3
Pneumonia	2
Scarlet fever	5
Smallpox	83
Syphilis	22
Tuberculosis	3

GULFPORT HEALTH DISTRICT, MISS.

Diphtheria:	
Biloxi	1
Gonorrhea:	
Biloxi	1
Logtown	1
Pascagoula	1
Influenza:	
Biloxi	2
Gulfport	5
Kreole	1
Long Beach	2
Mississippi City	1
Orange Grove	2
Pascagoula	1
Pass Christian	2
Malaria:	
Escatawpa	1
Ford	1
Gulfport	1
Moss Point	9
Pascagoula	1
Saucier	1
Measles:	
Lyman	1
Mumps:	
Gulfport	2
Handsboro	1
Mississippi City	10
Moss Point	2
Pneumonia:	
Lyman	1
Pascagoula	2
Scarlet fever:	
Biloxi	2
Syphilis:	
Logtown	1
Pascagoula	1
Typhoid fever:	
Mississippi City	1
Whooping cough:	
Biloxi	6
Ford	1
Moss Point	1
Saucier	1

CAMP HUMPHREYS ZONE, VA.

Chicken pox:	
Alexandria	2
Gonorrhea:	
Alexandria	5

CAMP HUMPHREYS ZONE, VA.—continued

Influenza:	
Alexandria	
Alexandria County	
Fairfax County	
Fredericksburg	
Malaria:	
Alexandria	
Mumps:	
Alexandria	
Fredericksburg	
Pneumonia:	
Alexandria	
Alexandria County	
Fairfax County	
Fredericksburg	
Syphilis:	
Alexandria	
Tonsilitis:	
Alexandria	
Tuberculosis, pulmonary:	
Alexandria	
Typhoid fever:	
Alexandria	
Whooping cough:	
Fredericksburg	

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	
Diphtheria	
Influenza	
Measles	
Menin itis	
Mumps	
Scarlet fever	
Whooping cough	
Government clinic:	
Gonorrhea	
Syphilis	

CAMP LEE ZONE, VA.

Petersburg:	
Chancroid	
Gonorrhea	
Influenza	
Measles	
Mumps	
Syphilis	

CAMP LEWIS ZONE, WASH.

Measles:	
Lake City	
Smallpox:	
Lakeview	
Nisqually Reservation	
Tuberculosis:	
Lake City	

CAMP MERRITT ZONE, N. J.

Englewood:	
Chicken pox	
Diphtheria	
Influenza	
Mumps	
Pneumonia	
Scarlet fever	
Tuberculosis	

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FARY DISTRICT, ALA.

	Cases.
	1
	1
	1
	1
	14
	2

ANT ZONE, GA.

	7
	1
	13
	2
	4
	3

ZONE, ARK.

	2
	1
	22
	21
	2
	5
	8
	6
	11
	5
	3
	1
	3
	1
	2

ZONE, N. C.

	2
	2
	2
	2
	1
	1
	1
	3
	1
	2
	1
	5

LK COUNTY HEALTH DIS-VA.

	13
	1
	2
	1

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.—continued.

Portsmouth:	Cases.
Chicken pox	1
Diphtheria	1
Gonorrhea	3
Measles	10
Meningitis	1

CAMP SHERIDAN ZONE, ALA.

Government clinic:	
Chancroid	1
Gonorrhea	6
Syphilis	9
Montgomery:	
Chicken pox	1
Gonorrhea	2
Typhoid fever	1

CAMP SHERMAN ZONE, OHIO.

Chillicothe:	
Diphtheria	1
Influenza	59
Pneumonia	4
Government clinic:	
Gonorrhea	7
Syphilis	2
Ross County:	
Influenza	21
Pneumonia	1

SOUTHER FIELD ZONE, GA.

Americus:	
Chicken pox	1
Fifteenth district:	
Smallpox	1
Syphilis	1

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Chicken pox:	
Louisville	2
Diphtheria:	
Jefferson County	3
Louisville	8
Gonorrhea:	
County jail clinic	1
Government clinic	28
Influenza:	
Clark County	78
Jefferson County	220
Jeffersonville	25
Louisville	761
New Albany	34
Measles:	
Clark County	2
Louisville	11
Pneumonia:	
Louisville	22
Scarlet fever:	
Jefferson County	1
Louisville	4
New Albany	2
Smallpox:	
Louisville	2
Syphilis:	
County jail clinic	1
Government clinic	22

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CAMP ZACHARY TAYLOR ZONE, KY. AND IND.—continued.

	Cases.
Tuberculosis, pulmonary:	
Louisville	10
Typhoid fever:	
Louisville	1
Whooping cough:	
Louisville	1

TIDEWATER HEALTH DISTRICT, VA.

Hampton:	
Chicken pox	3
Newport News:	
Cerebrospinal meningitis	1
Chicken pox	3
Gonorrhea	27
Influenza	3
Measles	1
Mumps	4
Pneumonia	2
Scarlet fever	1
Smallpox	4
Syphilis	2
Tuberculosis	1
Venereal (other than gonorrhea and syphilis)	4
Phoebus:	
Mumps	2

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chancroid	1
Diphtheria	2

CAMP TRAVIS ZONE, TEX.—continued.

San Antonio—Continued.	Cases.
Gonorrhea	17
Measles	2
Pneumonia	4
Smallpox	1
Syphilis	10
Typhoid fever	1

CAMP UPTON ZONE, N. Y.

Brook Haven:	
Pneumonia, broncho	1
Riverhead:	
Chicken pox	1
German measles	1
Pneumonia	1

WILMINGTON SANITARY DISTRICT, N. C.

East Wilmington:	
Influenza	1
Mumps	1
Sea Gate:	
Influenza	1
Wilmington:	
Chicken pox	1
Gonorrhea	25
Influenza	7
Meningitis	1
Pellagra	1
Scarlet fever	1
Syphilis	8
Tuberculosis	2

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended February 28, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	1,165.58	1,202.30
All troops in United States	1,211.70	1,442.95
American Expeditionary Forces	1,150.30	1,118.60
Annual admission rate per 1,000 (disease only)	993.50	957.80
All troops in United States	1,011.82	1,233.62
American Expeditionary Forces	987.49	895.57
Noneffective rate per 1,000 on day of report	53.13	52.62
All troops in United States [1]	64.80	63.73
American Expeditionary Forces	49.23	48.13
Annual death rate per 1,000 (all causes)	17.33	15.93
All troops in United States [1]	10.08	10.47
American Expeditionary Forces	19.75	17.89
Annual death rate per 1,000 (disease only)	14.38	12.86
All troops in United States [1]	9.61	9.85
American Expeditionary Forces	15.97	13.99

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

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ial diseases reported during the week ended Feb. 28, 1919.

Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
4	.....	2	12	.....	.....	.....	.....	.....	1,533.31	54.56
5	.....	1	13	7	1	14	1	.....	2,135.28	111.82
.....	.....	.....	.....	.....	.....	.....	.....	.....	323.98	15.57
1	.....	.....	3	.....	1	.....	.....	.....	875.08	247.21
1	.....	.....	8	.....	2	1	.....	.....	1,014.18	76.49
4	.....	.....	49	4	.....	.....	.....	.....	996.25	56.57
.....	.....	.....	48	4	.....	.....	.....	.....	1,417.75	59.93
1	.....	.....	4	.....	2	1	.....	.....	530.34	27.53
.....	.....	1	10	.....	3	.....	.....	1	632.33	24.28
2	.....	.....	7	1	.....	.....	.....	.....	710.16	102.17
.....	.....	.....	8	4	9	.....	.....	.....	557.93	37.01
.....	.....	.....	10	4	1	.....	.....	.....	1,470.86	59.01
1	.....	.....	1	.....	.....	.....	.....	.....	1,244.98	63.47
1	.....	.....	7	3	.....	.....	1	.....	1,141.25	81.48
1	.....	.....	6	.....	3	1	.....	.....	714.35	58.73
2	.....	.....	8	6	.....	1	.....	3	1,224.72	81.57
2	.....	.....	11	3	2	.....	1	.....	695.41	86.73
3	.....	.....	19	8	1	2	.....	.....	785.26	68.78
7	.....	.....	36	1	4	.....	.....	10	1,665.97	134.21
.....	.....	1	4	.....	19	1	.....	.....	1,085.86	31.73
.....	.....	.....	11	6	5	.....	.....	6	633.67	64.85
3	.....	.....	17	.....	16	2	.....	.....	1,437.07	75.14
4	.....	.....	3	.....	7	4	.....	.....	1,027.27	74.06
4	.....	.....	12	3	9	3	.....	1	683.83	25.97
9	.....	1	15	.....	15	3	.....	.....	1,097.08	66.12
1	.....	.....	5	.....	.....	.....	.....	2	629.82	11.35
.....	.....	.....	.....	.....	.....	.....	.....	4	1,454.82	55.57
.....	.....	.....	3	.....	.....	.....	.....	.....	1,747.50	82.65
7	.....	1	38	20	3	1	.....	1	1,285.65	80.07
8	.....	.....	29	.....	5	2	1	3	889.94	69.45
10	.....	.....	35	5	1	.....	.....	3	292.91	75.25
6	.....	2	25	.....	9	1	.....	2	1,768.22	129.64
8	.....	.....	11	.....	19	1	.....	1	1,613.49	125.46
27	.....	.....	5	3	81	.....	.....	7	1,161.45	117.35
4	.....	.....	42	.....	3	3	.....	.....	2,726.21	99.22
6	.....	.....	12	1	26	1	1	.....	1,686.48	111.18
.....	.....	.....	9	6	1	.....	.....	.....	789.43	26.41
3	.....	.....	17	6	22	3	.....	1	734.57	24.40
.....	.....	1	10	4	6	.....	.....	.....	1,202.25	34.77
.....	.....	.....	2	.....	2	.....	.....	1	1,227.08	29.41
16	.....	.....	52	5	128	2	.....	5	971.30	56.35
1	.....	.....	8	5	5	.....	.....	1	665.74	16.69
2	.....	3	34	.....	19	2	.....	.....	821.05	38.35
17	.....	.....	14	2	93	.....	.....	2	1,379.78	121.31
31	.....	.....	64	12	54	8	3	7	1,680.39	125.98
.....	.....	.....	.....	.....	.....	.....	.....	.....	860.92	23.17
10	.....	.....	.....	.....	.....	.....	.....	.....	1,317.54	39.78
.....	.....	.....	4	3	.....	.....	.....	.....	1,484.42	46.71
.....	.....	.....	3	.....	3	.....	.....	.....	3,997.52	112.83
.....	.....	.....	2	1	.....	.....	.....	.....	818.25	29.11
.....	.....	.....	11	.....	1	.....	.....	.....	1,303.83	33.92
1	.....	.....	10	10	12	.....	.....	3	823.62	44.23
.....	.....	.....	1	1	.....	.....	.....	.....	315.15	36.36
.....	.....	.....	1	1	.....	.....	.....	.....	1,200.57	73.59
.....	.....	.....	.....	.....	.....	.....	.....	.....	711.48	14.87
6	.....	.....	12	1	2	6	.....	3	608.21	30.82
8	.....	.....	14	1	12	1	.....	.....	577.77	33.88
227	.....	13	795	141	607	64	8	67	1,011.82	64.80

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Number of deaths and annual rates per 1,000 at large camps in United States, week ended Feb. 28, 1919.

Camp.	Strength.	Deaths.		Deaths—Annual rate per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Beauregard	4,307	1	1	12.07	12.07
Bowie	5,455				
Bragg	642				
Fremont	1,545				
Greene	3,948	2	1	26.34	13.17
Hancock	6,681	2	2	15.56	15.56
Kearny	4,438	1	1	11.71	11.71
Logan	3,922				
MacArthur	5,263				
McClellan	3,954	1	1	13.15	13.15
Sevier	3,728				
Shelby	4,101				
Sheridan	3,592				
Wadsworth	4,283	1	1	12.14	12.14
Wheeler	2,111				
Custer	8,704	1	1	5.97	5.97
Devens	8,001	1	1	6.49	6.49
Dix	21,718	1	1	2.39	2.39
Dodge	10,549	2	2	9.85	9.85
Eustis	7,279				
Funston	9,437	1	1	5.51	5.51
Gordon	9,408				
Grant	16,351	4	3	12.72	9.54
Humphreys	9,201				
Jackson	11,660	2	2	8.91	8.91
J. E. Johnston	1,321				
Henry Knox	2,645	1	1	19.65	19.65
Las Casas	1,101				
Lee	15,407	1	1	3.37	3.37
Lewis	13,031				
Meade	15,796	1	1	3.29	3.29
Pike	8,793	2	2	11.82	11.82
Sherman	11,861	5	5	21.92	21.92
Taylor	15,672	17	17	56.41	56.41
Travis	10,302	2	2	10.09	10.09
Upton	10,733	1	1	4.84	4.84
Northeastern Department	5,072				
Eastern Department	29,590	2	2	3.51	3.51
Southeastern Department	5,493				
Central Department	5,848	1	1	8.89	8.89
Southern Department	40,415	6	6	7.71	7.71
Western Department	11,565				
Aviation camps	33,060	1		1.57	
Ports of embarkation:					
Hoboken	27,214	13	13	24.84	24.84
Newport News	26,519	7	7	13.72	13.72
All others	93,124	26	24	14.51	13.40
Total	551,821	107	102	10.08	9.63

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	21.39	21.56	49.16	39.93
Dysentery		.06	.50	1.55
Malaria	1.22	1.32	.12	.75
Venereal	74.91	70.75	32.27	44.10
Paratyphoid			.12	.87
Typhoid	.09	.17	1.23	2.87
Measles	6.03	8.44	1.54	1.39
Meningitis	.75	.44	2.14	1.75
Scarlet fever	6.31	6.16	1.57	1.79
Influenza	57.20	48.40		

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CURRENT STATE SUMMARIES.

aphic Reports for Week Ended March 8, 1919.

e totals: Typhoid fever 1, malaria 3, smallpox 25,
fever 5, diphtheria 5, influenza 116.
te totals: Influenza, 99, meningitis 1, chicken pox
easles 16, ophthalmia 5, pellagra 3, scarlet fever 4,
rculosis 7, typhoid fever 12.
luenza cases reported 363, a slight increase over last
cases reported 40—Chico 19, Marysville 9, Redlands
5, balance of cases scattered over the State. Seven
ever—Oakland 4, Berkeley 1, Long Beach 1, River-
of poliomyelitis reported from Oakland. One case
eningitis reported from Tulare County.
o outbreak or unusual prevalence. Influenza cases
165.
totals: Typhoid fever 5, scarlet fever 4, dysentery
One case epidemic menigitis at Jacksonville.
heria 175, of which in Chicago 151; scarlet fever 97,
go 69; smallpox 63, of which in Peoria 11, Pekin 10,
eeling 6, Bloomington 4; meninigitis, in Chicago 1,
poliomyelitis, in Chicago 3, Eldorado 1; gonorrhea
influenza 1,138 (of which in Chicago 349). Re-
luenza noted in following communities: Versailles
County) 12, Herscher 26, Streator 11, Centralia
n County) 18, Waterloo 16, Beaucoup precinct
0, Springfield 111, Freeport 11, Butler Township
y) 13.
enza cases reported in State 1,520. Scarlet fever:
Hendricks, Randolph, Porter, Elkhart, and Wells
ox: Present in Vermilion, Laporte, Fayette, Parke,
counties, Delaware County 32, Elkhart County 64.
Parke 1, Elkhart 1. Rabies: Spencer 1, Cass 1.
Wayne 9, Elkhart County 3, Wayne County 3,
1, Randolph 1, Fountain 3, Marshall 1, Shelby 2,
anoe 2, Greene 2, and Johnson 2. Syphilis 27,

pinal meningitis: Des Moines 1. Chicken pox
phtheria: Davenport 2, Des Moines 3. Gonorrhea:
r Rapids 2, Correctionville 1, Davenport 2, Des
ne 3, Mason City 2, Newton 3, Oskaloosa 1, Sioux
1. Measles: Bellevue 1. Scarlet fever: Albion 1,
arksville 2, Danville 2, Davenport 2, Des Moines 13,
1, Ottosen 1, South Fort Des Moines 1, West
ox: Boone 3, Cedar Rapids 10, Council Bluffs 1,

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Davenport 11, Des Moines 2, Dubuque 1, Ottumwa 3. Syp
Cedar Rapids 1, Davenport 8, Dubuque 2, Keokuk 1, Mind
Sioux City 2. In rural districts of following counties. Dipht
Boone 1, Dallas 1, Kossuth 1, Marion 1, Tama 1. Scarlet
Dallas 4, Delaware 1, Des Moines 4, Harrison 1, Henry 1, Jack
Jasper 1, Kossuth 1, Marshall 1, Monroe 3, Union 2, Winneb
Smallpox: Boone 3, Des Moines 2, Floyd 1, Grundy 2, Johns
Lucas 1, Monona 1. Influenza cases reported in State, 485.

Kansas.—State totals: Typhoid fever 4, smallpox 66, diph
19, scarlet fever 89, influenza 3,759. Counties reporting inc
over 100 cases of influenza: Crawford, Ford, Marion, Osage, Mit
Pratt, Reno, Rice, and Smith. Cities reporting increases ove
cases: Wichita and Topeka.

Louisiana.—State totals: Influenza 220, smallpox 39, ty
fever 2, diphtheria 6, meningitis 1.

Maine.—Cerebrospinal meningitis: Coplin 1. Chicken pox: I
ton 1. Diphtheria: Greenbush 1, Oldtown 2, Portland 1.
orrhea: Augusta 1, Bath 3, Belfast 2, Biddeford 2, Bright
Columbia Falls 1, Hebron 1, Lewiston 2, Portland 7, Skowhe
Waterville 1. Mumps: Sanford 1. Scarlet fever: Livermo
Oldtown 12, Portland 7. Smallpox: Bath 1, Turner 2, Lewis
Syphilis: Bangor 2, Bath 1, Calais 1, Portland 13, Waterv
Tuberculosis: Four cases reported. Typhoid fever: Jackm
Whooping cough: Baileyville 20. Influenza: Sixty-three
reported.

Massachusetts.—No unusual prevalence.

Minnesota.—Smallpox (new foci): Crow Wing County—Br
city 1; Koochiching County—International Falls village 1; Ka
County—Peace Township 1, Poroy Township 2. Syphilis 50
orrhea 92, chancroid 1.

New Jersey.—Reported cases: Influenza 815, pneumonia
No unusual prevalence of other diseases.

New York.—Outside of New York City. Typhoid fever:
teen. Measles: Cases 325, of which in Wellsville town and villa
in Erie County 71, in Niagara County 47. Scarlet fever: Case
Whooping cough: Cases 38. Diphtheria: Cases 228, of wh
Cattaraugus County 17, in Erie County 89. Smallpox: In A
city 1, Mechanicsville 1. Cerebrospinal meningitis: Cases 3.
myelitis: One. Pneumonia: Cases 218. Voluntary reports: Sy
119, gonorrhea 25.

North Carolina.—State totals: Whooping cough 180, measle
diphtheria 16, scarlet fever 9, septic sore throat 6, smallpo
chicken pox 35, infantile paralysis 1, typhoid fever 5, epi
meningitis 1, broncho-pneumonia 39, lobar pneumonia 29, p
phoid fever 1, syphilis 12, gonorrhea 30, chancroid 2. Ca

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by counties: Cleveland 75, Franklin 1, Gaston 7, 5. Influenza cases reported in city of Charlotte, 49. x under control. Scarlet fever: Portage County 27, hip (Marion County) 6. Diphtheria: Chillicothe 9, achoma: Portsmouth 55.

nza: Portland 18 cases (2 deaths), Clackamas ounty 4, Multnomah County 1.

teen towns report 265 cases of influenza. No other e.

case cerebrospinal meningitis at Norfolk. Several King William County. Thirty-four cases influenza Thirteen cases lethargic encephalitis reported in), of which in Richmond 4, in Petersburg 2, Amelia tan County 1, Mecklenburg County 1, Nottoway County 1; with 2 cases brought into State from r treatment.

ANTHRAX.

y Report for Week Ended Feb. 22, 1919.

ase of anthrax reported in New York, N. Y., during ebruary 22, 1919.

CEREBROSPINAL MENINGITIS.

n Extra-Cantonment Zones, Week Ended Mar. 8, 1919.

	Cases.		Cases.
.....	1	Tidewater health district, Va.....	1

State Reports for January, 1919.

	New cases reported.	Place.	New cases reported.
		Virginia:	
.....	1	Campbell County.....	2
.....	8	Princess Anne County.....	1
.....	1	Prince George County.....	5
		Prince William County.....	1
.....	10	Rockbridge County.....	1
		Spotsylvania County—	
.....	1	Fredericksburg.....	1
.....	1	Total.....	11
.....	1		
.....	3		

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DIPHTHERIA.

Reported in Extra-Cantonment Zones, Week Ended Mar. 8, 1919.

	Cases.
zone, Iowa	3
th district, Miss	1
n zone, S. C	1
zone, N. J	1
s sanitary district, Ala	1
Portsmouth and Norfolk County health district, Va	1
Camp Sherman zone, Ohio	1
Camp Zachary Taylor zone, Ky. and Ind	11
Camp Travis zone, Tex	2

Diphtheria, measles, scarlet fever, and tuberculosis, page 527.

GONORRHEA.

Reported in Extra-Cantonment Zones, Week Ended Mar. 8, 1919.

	Cases.
zone, Iowa	5
zone, Ark	1
ne School zone, Ga. and Ala	7
n zone, Ga	14
th district, Miss	3
hreys zone, Va	3
n zone, S. C	8
ne, Va	5
Plant zone, Ga	7
Camp Pike zone, Ark	25
Portsmouth and Norfolk County health district, Va	3
Camp Sheridan zone, Ala	8
Camp Sherman zone, Ohio	7
Camp Zachary Taylor zone, Ky. and Ind	29
Tidewater health district, Va	27
Camp Travis zone, Tex	17
Wilmington sanitary district, N. C	26

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Colbert County	1	Virginia:	
Dallas County	1	Accomac County	1
Dekalb County	1	Roanoke County—	
Escambia County	2	Roanoke	1
Jefferson County	13	Warwick County—	
Lamar County	1	Newport News	1
Limestone County	1		
Lowndes County	1	Total	3
Montgomery County	1		

City Reports for Week Ended Feb. 22, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Dallas, Tex	1	1	New Haven, Conn	1	1
Houston, Tex		1	Oklahoma City, Okla		1
Memphis, Tenn		1	Springfield, Mo		1
Mobile, Ala		1			

PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 8, 1919.

	Cases.		Cases.
Camp Dix zone, N. J	1	Camp Merritt zone, N. J	5
Camp Eberts zone, Ark	1	Camp Pike zone, Ark	9
Fayetteville sanitary district, N. C	5	Camp Polk zone, N. C	1
Camp Funston zone, Kans	7	Camp Sherman zone, Ohio	5
Gas and Flame School zone, Ga. and Ala	6	Camp Zachary Taylor zone, Ky. and Ind	22
Camp Gordon zone, Ga	2	Tidewater health district, Va	2
Gulfport health district, Miss	3	Camp Travis zone, Tex	4
Camp Humphreys zone, Va	9	Camp Upton zone, N. Y	1

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...ield, Mass.	21	3		
...ton, Mass.	1	1		
...on, N. J.	2	6		
...rtown, Mass.	1	1		
...hester, Mass.	1			
...ton-Salem, N. C.	2	2		
...ester, Mass.	9	8		2

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for January, 1919.

...uring the month of January, 1919, there were reported *one case* ...oliomyelitis at Cherryvale, Montgomery County, Kans., and one ... in Campbell County, Va.

City Reports for Week Ended Feb. 22, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
...o, Ill.	1		Kokomo, Ind.		1
...nati, Ohio.	1		Middletown, Ohio.		1
...t, Mich.	2	1	New York, N. Y.	2	

RABIES IN ANIMALS.

City Reports for Week Ended Feb. 22, 1919.

...uring the week ended February 22, 1919, four cases of rabies in ...nals were reported—one case at each of the following-named ...es: Covington, Ky., Detroit, Mich., Greenwich, Conn., and Mem..., Tenn.

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Place.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
n County—						
hison	8				8	
rmings	1				1	
County—						
el	1			1		
County—						
sington	3				3	
County—						
onia	7				7	
County—						
Hill	1				1	
ounty—						
rdville	5				5	
e County—						
mbus	1				1	
na	2				2	
nty—						
on	2				2	
unty—						
o (R. D.)	1				1	
County—						
burg	2				2	
n County—						
(R. D.)	2			1	1	
d County—						
ont (R. D.)	7				7	
unty—						
on (R. D.)	3				3	
nty—						
County—	1				1	
	2				2	

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Topeka	1				1	
Sumner County—						
Conway Springs (R. D.)	1				1	
Wyandotte County—						
Basehor (R. D.)	1				1	
Kansas City (R. D.)	1				1	
Total	103		1	2	100	

State Reports for January, 1919.

Place.	Cases.	Deaths.
Alabama:		
Autauga County	20	
Bibb County	2	
Calhoun County	3	
Cullman County	150	
Dallas County	1	
Geneva County	2	
Jackson County	3	
Jefferson County	7	
Lauderdale County	6	
Lawrence County	1	
Lee County	1	
Limestone County	12	
Tuscaloosa County	2	
Washington County	1	
Total	211	
South Dakota:		
Codington County	2	
Davison County	4	
Day County	7	
Douglas County	1	
Total	14	
Virginia:		
Accomac County	1	
Alleghany County	4	
Covington	11	
Botetourt County	14	
Campbell County	8	
Charlotte County	1	
Dinwiddie County	8	
Giles County	6	
Halifax County	7	
King William County	6	
Lunenburg County	6	
Mecklenburg County	1	
Montgomery County	3	
Norfolk County—		
Norfolk	4	
Nottoway County	1	
Blackstone	2	
Pittsylvania County	8	
Prince Edward County	10	
Prince George County	4	
Roanoke County—		
Roanoke	3	
Rockingham County	9	
Russell County—		
Wilder	3	
Smyth County—		
Marion	3	
Surry County	2	
Sussex County	2	
Tazewell County—		
Pocahontas	1	
Warren County	2	
Warwick County—		
Newport News	1	
Total	131	

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TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 8, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga	3	Camp Pike zone, Ark	5
Camp Humphreys zone, Va	1	Camp Zachary Taylor zone, Ky. and Ind	10
Camp Lewis zone, Wash	1	Tidewater health district, Va	1
Camp Merritt zone, N. J	1	Wilmington sanitary district, N. C	2
Picric Acid Plant zone, Ga	3		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 527.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 8, 1919.

	Cases.		Cases.
Gulfport health district, Miss	1	Camp Sheridan zone, Ala	1
Camp Humphreys zone, Va	1	Camp Zachary Taylor zone, Ky. and Ind	1
Camp Polk zone, N. C	1	Camp Travis zone, Tex	1

State Reports for January, 1919.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		Virginia:	
Bibb County	2	Accomac County	2
Colbert County	1	Albemarle County—	
Covington County	1	Scottsville	1
Cullman County	2	Alleghany County—	
DeKalb County	1	Clifton Forge	4
Franklin County	2	Jordan Mines	1
Greene County	1	Lowmoor	11
Houston County	5	Appomattox County	4
Jackson County	1	Bedford County	1
Jefferson County	7	Buckingham County	2
Macon County	1	Dickenson County	1
Montgomery County	3	Dinwiddie County	1
Pike County	1	Hanover County—	
Wilcox County	1	Ashland	1
Total	29	Fauquier County	2
		Northampton County	1
Kansas:		Northumberland County	1
Brown County—		Orange County	1
Horton	1	Page County	1
Crawford County—		Shenandoah	3
Pittsburg (R. D.)	2	Prince Edward County	1
Ellis County—		Richmond County	1
Ellis	1	Smyth County—	
Leavenworth County—		Marion	2
Easton (R. D.)	2	Sussex County	2
Montgomery County—		Tazewell County—	
Coffeyville	1	Graham	1
Scott County—		Warwick County—	
Scott City	1	Newport News	3
Sedgwick County—		Wise County—	
Wichita (1 R. D.)	3	Roda	1
Wyandotte County—		Total	32
Kansas City	3		
Total	14		

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TYPHOID FEVER—Continued.

City Reports for Week Ended Feb. 22, 1919.

	Cases.	Deaths.	Place.	Cases.	Deaths.
....	1	.....	Lackawanna, N. Y.....	1	.....
....	1	.....	Lawrence, Mass.....	8	.....
....	1	.....	Leominster, Mass.....	1	.....
....	6	.....	Los Angeles, Calif.....	2	.....
....	2	.....	Memphis, Tenn.....	2	.....
....	3	.....	Meriden, Conn.....	1	.....
....	2	2	Milwaukee, Wis.....	1	.....
....	1	.....	Minneapolis, Minn.....	2	1
....	1	.....	Moline, Ill.....	4	1
....	1	.....	Monessen, Pa.....	1	.....
....	1	.....	New Haven, Conn.....	1	.....
....	2	1	Newton, Mass.....	1	.....
....	1	.....	New York, N. Y.....	2	2
....	.....	2	Omaha, Nebr.....	1	.....
....	1	.....	Orange, Conn.....	1	.....
....	2	.....	Philadelphia, Pa.....	9	2
....	1	1	Quincy, Ill.....	.....	1
....	.....	1	Rochester, N. Y.....	1	.....
....	2	.....	St. Joseph, Mo.....	.....	1
....	1	.....	St. Louis, Mo.....	2	.....
....	2	.....	St. Paul, Minn.....	1	.....
....	1	.....	San Antonio, Tex.....	2	1
....	9	.....	Seattle, Wash.....	2	.....
....	2	.....	Springfield, Mass.....	1	.....
....	1	.....	Troy, N. Y.....	1	.....
....	1	.....	Williamsport, Pa.....	1	.....
....	2	.....	Wilmington, N. C.....	.....	1
....	1	.....	Worcester, Mass.....	1	.....
....	.....	1			

MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for January, 1919.

Cases reported.			State.	Cases reported.		
ph-ria.	Measles.	Scarlet fever.		Diph-theria.	Measles.	Scarlet fever.
50	148	28	South Dakota.....	3	.....	15
109	66	111	Virginia.....	98	316	69

ty Reports for Week Ended Feb. 22, 1919.

	Popula-tion as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber-culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
.....	15,926	5	.....	.....	.....	.....	.....	.....	.....	.....
.....	11,570	2	.....	.....	.....	.....	1	.....	.....	.....
.....	93,604	38	3	.....	27	.....	4	.....	12	.....
.....	28,433	2	3	.....	.....	.....	.....	.....	1	1
.....	16,232	5	.....	.....	.....	.....	.....	.....	.....	.....
.....	65,109	.....	3	.....	2	.....	.....	.....	2	.....
.....	19,581	9	.....	.....	.....	.....	.....	.....	.....	.....
.....	23,783	7	.....	.....	.....	.....	.....	.....	.....	.....
.....	59,712	.....	5	.....	.....	.....	.....	.....	1	.....
.....	24,230	5	.....	.....	.....	.....	.....	.....	.....	1
.....	15,041	8	.....	.....	.....	.....	.....	.....	.....	.....
.....	16,954	3	.....	.....	.....	.....	.....	.....	.....	.....
.....	18,005	2	.....	.....	.....	.....	.....	.....	.....	.....
.....	13,073	5	.....	.....	.....	.....	.....	.....	1	.....
.....	14,629	4	.....	.....	.....	.....	.....	.....	.....	.....

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Feb. 22, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Asheville, N. C.	25,656	22							10	10
Ashtabula, Ohio	22,008	9	1						1	1
Atlanta, Ga.	196,144	76			3		7		1	5
Atlantic City, N. J.	59,515	10					3			
Attleboro, Mass.	19,776	6	1				1		2	
Auburn, N. Y.	37,823	10	1				1			3
Austin, Tex.	35,612	6							1	1
Bakersfield, Calif.	17,543		1							
Baltimore, Md.	594,637	335	32	2	16		151		57	38
Bangor, Me.	26,958						1			
Barre, Vt.	12,401	3								1
Baton Rouge, La.	17,544	7							3	1
Battle Creek, Mich.	30,159		7		3		1			
Bayonne, N. J.	72,204		2						7	
Beacon, N. Y.	11,674	2								
Beatrice, Nebr.	10,437	5								
Beaumont, Tex.	28,851	6							1	
Bedford, Ind.	10,613	4								
Bellaire, Ohio	14,575	4					1			
Belleville, Ill.	31,154		1				6			
Beloit, Wis.	18,547	5								1
Berkeley, Calif.	60,427	12							2	1
Berlin, N. H.	13,892	5								
Beverly, Mass.	22,128	4								1
Biddeford, Me.	17,760	3								
Billings, Mont.	15,123						6			
Binghamton, N. Y.	54,864	17	2				1			1
Birmingham, Ala.	189,716	70	4		9				8	9
Bloomfield, N. J.	19,013		2						1	
Bloomington, Ind.	11,661	5								2
Boston, Mass.	767,813	275	51	5	13		40	1	64	34
Brazil, Ind.	10,472	6								
Bridgeport, Conn.	124,724	64	12		21		2		4	7
Bristol, Conn.	16,318	2					2			
Brockton, Mass.	69,152	15	3				3		5	1
Brookline, Mass.	33,526	9	1		2		1			
Brunswick, Ga.	10,984	3			9				1	1
Buffalo, N. Y.	475,781	154	23	7	29	2	18	1	38	9
Burlington, Iowa	25,144	9					2			
Burlington, Vt.	21,802	8			32	1	1			1
Butte, Mont.	44,057						2			
Cairo, Ill.	15,995	7								2
Cambridge, Mass.	114,293	32	3		4				7	3
Camden, N. J.	108,117		2				3			
Canton, Ohio	62,566	22	1		6				4	
Cape Girardeau, Mo.	11,146	1								1
Chanute, Kans.	12,968	4								
Charleston, S. C.	61,041	14			2					
Charleston, W. Va.	31,060	20							1	1
Charlotte, N. C.	40,759	11	1		11					
Chelsea, Mass.	48,405				1				3	1
Chester, Pa.	41,857								1	
Cheyenne, Wyo.	[1] 11,320				8					
Chicago, Ill.	2,547,201	848	93	11	122	4	56	5	313	61
Chicopee, Mass.	29,950	12								1
Chillicothe, Ohio	15,625	1	1							
Cincinnati, Ohio	414,248	188	10	1	9		8		22	19
Cleveland, Ohio	692,259	243	38		1	1	4		38	30
Clinton, Iowa	27,678		2							
Clinton, Mass.	[1] 13,075	4			1					1
Coffeyville, Kans.	18,331								2	1
Cohoes, N. Y.	25,292	8	1				2	1		1
Colorado Springs, Colo.	38,965	14					3		4	2
Columbia, S. C.	35,165		1				1			
Columbus, Ohio	220,135	78	2		2		2		5	4
Concord, N. H.	22,858	7								
Corpus Christi, Tex.	10,789	4	2							
Council Bluffs, Iowa	31,838	10								
Covington, Ky.	59,623	30	1	1				1	2	1
Cranston, R. I.	26,773	2								
Cumberland, Md.	26,686	6			36					
Dallas, Tex.	129,738	35			1				9	3
Danvers, Mass.	10,037			1						

[1] Population Apr. 15, 1910.

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EASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

eports for Week Ended Feb. 22, 1919—Continued.

	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
	32,969	15	1						1	1
	49,618		1				2			
	128,939	40	5						3	
	41,483	14	3						1	
	10,618	4	4							
	268,439	92	5		2		9			23
	104,052		9	1	1		11			
	619,648	320	88	12	24	1	46	2	37	22
	13,276	9								1
	14,294		1							
	40,096		1							2
	97,077	18	1		2				5	2
	26,160	5								
	30,286	10						1		1
	30,854				4					
	43,761	16					4		2	1
	18,887				2		2			
	28,562	12		1			1			2
	88,830	23	5	1			3		4	
	38,272	21	5				1		3	1
	69,149	53	1				1			13
	12,603	5	1		1					
	76,592		2		1		1			
	15,854	3								
	15,142	4								
	29,304	4			4		1			
	49,160	13	1						1	
	37,205						1			
	16,111		1							
	129,828	64	4	1	21		2		4	2
	17,872	4					7			
	14,858	4			3					
	21,486	5					5			
	10,564	2								1
	78,014	39	1						1	
	103,597	25	1		2		2		2	2
	10,959	3					1			1
	11,225	4								
	11,034	5								
	35,314	4								
	21,629	12			8					
	42,650	10	1							
	13,915	8	1							
	16,342	4								
	132,861	29	3		3				11	2
	[1] 13,948	7			21					
	30,017	10							1	
	12,251	6					1			1
	20,171	13								2
	18,574	3								
	19,594		1				7		1	
	17,412	7	2						1	1
	27,016	16	2	1						
	73,276		1				1			
	17,345						1			
	112,831	72	10		52		11	1	5	4
	49,180	21	5				1		3	
	33,859	10	4		1		3			1
	78,324	15	12	1	2		1			1
	66,503	25	1	1			9		2	2
	116,878	45	2		6		1		4	5
	12,898	3								
	21,461		1							
	11,964	7			7		3			2
	233,622	117	12	2	18		13		2	5
	14,079	3	2							
	15,095	2	1				1			1
	16,017	7			1		9			
	31,104						2			
	37,431	8	2				5			
	14,411	8								
	312,557		33		6		8		6	

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Feb. 22, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Johnstown, N. Y.	10,678	2								
Johnstown, Pa.	70,473		8							
Joplin, Mo.	33,400	6	1						3	
Kalamazoo, Mich.	50,408	17	3		1		8			1
Kansas City, Kans.	102,096		5				1		7	
Kansas City, Mo.	305,816	133	4	1	27	2	8		1	11
Keene, N. H.	10,725	2								
Kenosha, Wis.	32,833	5	2		19		4			
Knoxville, Tenn.	59,112		1		10				1	1
Kokomo, Ind.	21,929	10					7			
Lackawanna, N. Y.	16,219	4	2		4		3			
La Crosse, Wis.	31,833	6								
La Fayette, Ind.	21,481	8					2	1		
Lakewood, Ohio.	23,813	9					1			
Lancaster, Ohio.	16,086	7			1		4			
Lancaster, Pa.	51,437				242					
Lawrence, Kans.	13,477	4			8					
Lawrence, Mass.	102,923	26	3	1					4	
Leavenworth, Kans.	[1] 19,363	3	8	1			1			
Lebanon, Pa.	20,947		1		61		1		2	
Leominster, Mass.	21,365	4	1		26		1			
Lexington, Ky.	41,997	20			2		1			2
Lima, Ohio.	37,145	7	1				1			1
Lincoln, Nebr.	46,957	19	2				1			
Little Rock, Ark.	58,716	6	1		3		10		2	1
Lockport, N. Y.	20,028				6					
Logansport, Ind.	21,338	6								
Long Beach, Calif.	29,163	18					1		1	2
Long Branch, N. J.	15,733	1								
Lorain, Ohio.	38,266	11			16		1		1	1
Los Angeles, Calif.	535,485	134	13		13		12		35	18
Louisville, Ky.	240,808	113	6	1	1		2		7	13
Lowell, Mass.	114,366	34	6				4		1	4
Ludington, Mich.	10,566		4				1			
Lynchburg, Va.	33,497	11								1
Lynn, Mass.	101,534	33	3		1		2	1	3	2
McKeesport, Pa.	48,299		1						1	
Madison, Wis.	31,315	12			16		4			1
Malden, Mass.	52,243						3		2	
Manchester, Conn.	15,859				2				1	
Manchester, N. H.	79,607	21	6						3	3
Manitowoc, Wis.	13,931	8					4			
Marinette, Wis.	[1] 14,610				6					
Marion, Ind.	19,923	8	2		1		13	1		2
Marlboro, Mass.	15,285	5	4							
Marquette, Mich.	12,555	6					1		1	
Martinsburg, W. Va.	12,984				2					
Mason City, Iowa	14,938	9								
Melrose, Mass.	17,724	1								
Memphis, Tenn.	151,877	59			5		2		5	10
Meriden, Conn.	29,431		1						2	1
Methuen, Mass.	14,320	3								
Middletown, N. Y.	15,890								1	
Middletown, Ohio.	16,384	7			7					
Milwaukee, Wis.	445,008	101	10		3		35	3	19	11
Minneapolis, Minn.	373,448	124	15	1	2		16	1	20	10
Missoula, Mont.	19,075	2	1				8			
Mobile, Ala.	59,201	19			3	1	1			2
Moline, Ill.	27,976	2	1							
Monessen, Pa.	23,070		3							
Montclair, N. J.	27,087	2							2	1
Montgomery, Ala.	44,039	14							1	
Morgantown, W. Va.	14,444	2							2	1
Morristown, N. J.	13,410	11	2	1						
Mount Carmel, Pa.	20,709		1						1	
Mount Vernon, Ill.	10,043	18								
Nanticoke, Pa.	23,811		3		3					
Nashua, N. H.	27,541	8								
Nashville, Tenn.	118,136	74	2		40		2		5	4
Natick, Mass.	10,140	4								
Newark, N. J.	418,789	152	59	2	1		21		37	19
Newark, Ohio.	30,317	9	2	2			1			

[1] Population Apr. 15, 1910.

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EASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

orts for Week Ended Feb. 22, 1919—Continued.

	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
	121,622	39	3	1	3		1		15	3
	55,285	20			32		7			2
	152,275	45	7		17		1		5	3
	21,199	11	10				3		2	1
	377,010	167	9		2		1		22	22
	23,123	16								
	20,585	1								
	44,245	13	1				2		5	
	5,737,492	2,129	291	41	50	3	109	2	292	198
	38,466	19	1				1		1	1
	91,148				4					2
	31,969				4					
	[1] 22,019	6								1
	20,006	9	6	1	1				1	
	11,248	1							1	
	14,060	5			18		1			
	22,058						6			
	27,332								1	
	21,923	2	1				2		1	
	206,405	29	4				3	1	9	4
	27,816	11	1		1					
	16,845	2								
	20,162				4					
	97,568	16			6		1			
	177,777	45	3		9		5			10
	14,393	3								1
	33,636	11	4				3		4	
	14,064	11	3	1					1	
	21,059	10			1				2	1
	49,620	15								2
	74,478	20	4						1	1
	19,034	7								3
	10,973		1							
	72,184	25	2				2			2
	42,646	6	1						1	1
	1,735,514	720	80	9	18		55	1	120	80
	11,871				3					
	14,275	7					1		1	
	586,196		16		5		10		20	
	39,678	6								1
	24,330	12	1		1					
	13,111	4	4							
	14,001	4								
	19,439				11					
	18,006	7	4							
	16,727	5	2						3	
	64,720	25	1				4			2
	308,399	70	6				2		3	3
	22,717		4		6					
	30,786	10	2						3	
	259,895	91	30	2			7			5
	36,832	6	2				7			
	39,022	9	2		2		1		2	1
	47,465	7			1		2		3	
	10,361	3								1
	20,274	14								3
	111,607		4		282		2			
	14,573	1					3			
	158,702	53	1	1	2		8		7	9
	20,496	11					1			
	46,282	15			16		1			2
	284,714	73	9	3	1		12		14	3
	56,739	11	1		13		4		2	
	29,452	7								
	12,673	6								1
	24,259		3						5	
	15,038	8								
	68,984	25	1				1		3	4
	56,469	17	2				1			
	89,498	31	4	1					6	1
	768,630	231	33	2	2		15		42	20
	252,465	56	30	6	9		19		9	6

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Feb. 22, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Salem, Mass.	49,345	11	1				2		1	1
Salem, Oreg.	21,274	10					1			
Salt Lake City, Utah.	121,623	34	4		1		6			
San Antonio, Tex.	128,215	20	1		5				10	9
San Diego, Calif.	56,412	20					2		3	3
Sandusky, Ohio.	20,226	4							1	
Sanford, Me.	11,217									1
San Francisco, Calif.	471,023	156	6		2		5		21	16
Santa Barbara, Calif.	15,330	1								
Santa Cruz, Calif.	15,150	2								
Saratoga Springs, N. Y.	13,839	1	1							
Saugus, Mass.	10,210	2							1	
Sault Ste. Marie, Mich.	14,130	4								
Schenectady, N. Y.	103,774	22	4		1		1		3	1
Seattle, Wash.	336,445		8		10		10			
Shamokin, Pa.	21,274		2		2		2			
Sharon, Pa.	19,156				1					
Shenandoah, Pa.	29,753				5				1	
Sioux City, Iowa.	58,568	1	2				3			
Sioux Falls, S. Dak.	16,887	4								
Somerville, Mass.	88,618	35	7	1	5		3		1	1
South Bend, Ind.	70,967	23	1		45		2			
Southbridge, Mass.	14,465	3							1	
Spartanburg, S. C.	21,985	5			4					1
Springfield, Mass.	108,668	45	1						9	1
Springfield, Mo.	41,169	12								1
Springfield, Ohio.	52,296	12			11					1
Steubenville, Ohio.	28,259	11	1							
Stillwater, Minn.	[1] 10,198		1							
Stockton, Calif.	33,209	9	1				1		3	2
Streator, Ill.	14,313	8								
Superior, Wis.	47,167	15								1
Syracuse, N. Y.	158,559	48	2		2		9		1	4
Tacoma, Wash.	117,446		1		9		3			
Taunton, Mass.	35,610	22			8		1			6
Terre Haute, Ind.	67,331	20							2	1
Tiffin, Ohio.	12,952	4								
Toledo, Ohio.	202,010	81	3	2	6		11		1	9
Topeka, Kans.	49,738	15	3							1
Trenton, N. J.	113,974	58					1		6	8
Troy, N. Y.	78,094	27	2	1	1		5			1
Tuscaloosa, Ala.	10,824		2	1			1		2	
Utica, N. Y.	81,272	39	6	1	15		1		10	4
Vallejo, Calif.	13,803	7								
Virginia, Minn.	15,954								1	
Waltham, Mass.	31,011	12	1				4			
Warren, Pa.	15,083				2					
Washington, D. C.	339,282	141	26	2			20		23	18
Waterbury, Conn.	80,201		8		5		12		4	
Watertown, Mass.	15,188	1								
Watertown, N. Y.	30,404	8		1						3
Wausau, Wis.	19,666	7			3		6			
West Chester, Pa.	13,403		1				8			
Westfield, Mass.	18,769	6	2	1			1		1	1
West Hoboken, N. J.	44,385	9	1				1		3	
West New York, N. J.	19,613	7	3				5		1	
West Orange, N. J.	13,964	3	2				2		2	1
Wheeling, W. Va.	43,657	20							1	1
White Plains, N. Y.	23,331	7					4			
Wichita, Kans.	73,597	44	1				3		5	3
Wilkes-Barre, Pa.	78,334		2		4				1	
Williamsport, Pa.	34,123		2				3			
Wilmington, N. C.	30,400	12	1						1	1
Winchester, Mass.	10,812	3								1
Winona, Minn.	[1] 18,583	4								
Winston-Salem, N. C.	33,136	18			5				3	3
Winthrop, Mass.	13,105				1					
Woburn, Mass.	16,076	3								
Worcester, Mass.	166,106	65	3	1	12		6		4	2
Yonkers, N. Y.	103,066	23	3		1			1	9	2
Youngstown, Ohio.	112,282		2	1	7	1	3		2	2
Zanesville, Ohio.	31,320	16			7		3			

[1] Population Apr. 15, 1910.

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FOREIGN.

ALGERIA.

Influenza—Algiers.

nth of January, 1919, influenza was reported present
ring the summer of 1918 influenza was reported
ing the month of November, 1918, 260 fatal cases of
reported.

CANARY ISLANDS.

Influenza—Santa Cruz de Teneriffe.

reported present at Santa Cruz de Teneriffe in
December, 1918, and during the first week in Janu-
disease was reported prevalent in October, 1918, in
and Canary, La Palma, and Teneriffe.[1]

CHINA.

Pneumonic Plague—Shansi Province.

tion received under date of January 29, 1919, from
the prevalence of pneumonic plague in Shansi
n villages were stated to be infected and 70 fatal
to have occurred in the Linghsien district to January

CUBA.

Restrictions Against New Orleans Removed.

rcular of March 7, 1913, requiring vessels leaving
ports in Cuba to exterminate their rats at intervals
six months was repealed by order dated January

DENMARK.

er Relative to Influenza—Copenhagen—Odense.[2]

been reported in Denmark as follows: At Copen-
ne two weeks ended January 25, 1919, 4,877 cases;
November 24 to December 28, 1918, 2,731 cases,

[1] Health Reports, Dec. 13, 1918, p. 2243.
[2] Health Reports, Dec. 13, 1918, p. 2244, and Dec. 27, 1918, p. 2354.

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the greatest incidence occurring during the week ended No 30, viz, 1,203, and the lowest during the week ended Decem viz, 156. From December 29, 1918, to January 25, 1919, 79 were reported at Odense.

FRANCE.

Influenza—Paris.

During the period from December 29, 1918, to February 534 fatal cases of influenza were notified in Paris.

HAWAII.

Further Relative to Influenza—Island of Oahu.[1]

During the two weeks ended February 8, 1919, 341 cases enza, of which 4 cases were removed from arriving vessel reported on the island of Oahu (Honolulu, city and county).

PORTUGUESE EAST AFRICA.

Influenza—Lourenco Marques.[2]

During the three weeks ended December 22, 1918, 1,320 influenza with 175 fatalities were reported at Lourenco M Portuguese East Africa.

SPAIN.

Recurrence of Influenza—Barcelona.[3]

A recurrence of influenza was reported at Barcelona, Spai ruary 21, 1919. The prevalence was stated to be equal in ex area to that of the previous epidemic, but with less virulence disease. In October, 1918, 5,000 cases of influenza were r at Barcelona, with many fatalities.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW

Reports Received During Week Ended Mar. 14, 1919.[4]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Dec. 29-Jan. 11	1,386	1,167	
Madras	Jan. 5-18	288	197	
Rangoon	Dec. 29-Jan. 4	5	3	
Java:				
Mid-Java				Nov. 28-Dec. 18, 1918, deaths, 307.
West Java				Dec. 27, 1918-Jan. 2, 191
Batavia	Dec. 27-Jan. 2	2	2	deaths, 2.

[1] Public Health Reports, Feb. 28, 1919, p. 420.
[2] Public Health Reports, Feb. 14, 1919, p. 305.
[3] Public Health Reports, Oct. 25, 1918, p. 1849.
[4] From medical officers of the Public Health Service, American consuls, and other sour

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UE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

ived During Week Ended Mar. 14, 1919—Continued.

CHOLERA—Continued.

	Date.	Cases.	Deaths.	Remarks.
.....	Jan. 19–25.....	2	1	
.....	.....	.....	.....	Jan. 19–25, 1919: Cases, 66; deaths, 47.
.....	Jan. 19–25.....	6	5	
.....	.....do.....	9	8	
.....	.....do.....	1	.....	
.....	.....do.....	3	1	
.....	.....do.....	1	1	
.....	.....do.....	2	3	
.....	.....do.....	14	6	
.....	.....do.....	6	6	
.....	.....do.....	6	4	
.....	.....do.....	1	2	
.....	.....do.....	1	1	
.....	.....do.....	3	1	
.....	.....do.....	8	4	
.....	.....do.....	5	5	

PLAGUE.

.....	Jan. 16–21.....	16	6	
.....	.....	.....	.....	Dec. 29, 1918–Jan. 11, 1919: Cases, 3,361; deaths, 2,470.
.....	Dec. 29–Jan. 11....	6	3	
.....	Dec. 29–Jan. 18....	3	3	
.....	Jan. 5–18.....	4	4	
.....	.....do.....	1,053	680	
.....	Dec. 29–Jan. 4.....	4	4	

SMALLPOX.

.....	Sept. 1–Nov. 30...	6	1	
.....	Feb. 16–22.....	15	.....	
.....	Feb. 9–15.....	1	.....	
.....	Feb. 23–Mar. 1....	1	.....	
.....	Feb. 16–22.....	8	.....	
.....	Jan. 12–18.....	1	.....	Port case.
.....	Jan. 5–11.....	.....	.....	Present.
.....	Jan. 19–25.....	.....	.....	Do.
.....	Jan. 13–19.....	7	.....	
.....	Jan. 22–28.....	1	.....	
.....	Dec. 29–Jan. 11....	18	5	
.....	Dec. 22–Jan. 18....	21	2	
.....	Jan. 5–18.....	38	13	
.....	Dec. 29–Jan. 4.....	16	7	
.....	Jan. 5–18.....	108	22	
.....	.....	.....	.....	Nov. 28–Dec. 18, 1918: Cases, 8; deaths, 3.
.....	.....	.....	.....	Dec. 27, 1918–Jan. 2, 1919: Cases, 39; deaths, 12.
.....	Dec. 27–Jan. 2.....	13	8	
.....	Jan. 15–21.....	1	.....	
.....	Dec. 14–20.....	10	7	
.....	Feb. 10–16.....	.....	2	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YE FEVER—Continued.

Reports Received During Week Ended Mar. 14, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Newfoundland:				
St. Johns	Feb. 15–21	1		
Outports—				
Bay of Islands	do	10		
Petitforte	do	1		
Saddle Hill	do	1		Harbor Grace.
Springdale	do	1		
Panama:				
Colon	Feb. 3–9	1		
Philippine Islands:				
Manila	Jan. 19–25	2	1	

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Colombia:				
Barranquilla	Jan. 5–18		2	
Egypt:				
Alexandria	Jan. 15–21	6	3	
Great Britain:				
Glasgow	Feb. 2–8	1		
Greece:				
Saloniki	Jan. 5–18		17	
Japan:				
Nagasaki	Jan. 20–Feb. 2	6	2	
Mexico:				
Aguascalientes	Feb. 10–16		2	

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Duran	Jan. 16–31	2		
Guayaquil	do	26	11	

Reports Received from Dec. 28, 1918, to Mar. 7, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17–30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13 19	1		On a barge.
Marienwerder				1 case in October, 1918, in canal.
India:				
Bombay	Aug. 18 Dec. 28	1,351	1,031	
Calcutta	Sept. 29-Dec. 21		241	Report for Nov. 23, 1918
Do	Dec. 29 Jan. 4		27	
Madras	Oct. 5 Dec. 21	191	112	
Rangoon	do	35	33	
Indo-China:				
Anam	Aug. 1-31	5	5	
Cambodia	do	98	71	
Cochin-China	do	110	89	
Saigon	Oct. 7-Dec. 22	73	45	
Tonkin	Aug. 1-31	1		
Java:				
East Java				Oct. 7-21, 1918: Ca deaths, 94.
Surabaya (district)	Oct. 7-Nov. 18	636	391	Sept. 25-Nov. 27, 191
Mid-Java				2,883, deaths, 1,707.
Samarang	Sept. 25 Oct. 16	120	111	Oct. 2-Dec. 11, 1918. C
West Java				deaths, 238.
Batavia	Oct. 2-Dec. 11	291	148	
Mesopotamia:				
Bagdad	Oct. 11-18	8		

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E, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

ed from Dec. 28, 1918, to Mar. 7, 1919—Continued.

CHOLERA—Continued.

	Date.	Cases.	Deaths.	Remarks.
	Sept. 22-Dec. 28	181	121	
	Dec. 29-Jan. 18	10	4	
				Nov. 2-9, 1918: Cases, 511; deaths, 417. Nov. 17-Dec. 28, 1918: Cases, 1,203; deaths, 858. Dec. 29, 1918-Jan. 18, 1919: Cases, 344; deaths, 255.
	Dec. 15-21	1	1	
	Nov. 17-Dec. 28	38	32	
	Jan. 5-11	2	2	
	Nov. 2-9	156	141	
	Nov. 17-Dec. 28	79	65	
	Dec. 29-Jan. 18	13	10	
	Nov. 2-9	19	17	
	Nov. 17-Dec. 21	12	5	
	Jan. 12-18	8	4	
	Oct. 27-Nov. 2	5	6	
	Nov. 17-Dec. 28	44	30	
	Dec. 29-Jan. 18	24	14	
	Dec. 22-28	7	5	
	Jan. 5-18	25	13	
	Oct. 27-Nov. 2	38	28	
	Nov. 17-Dec. 21	163	75	
	Dec. 29-Jan. 18	16	15	
	Dec. 15-21	41	20	
	Jan. 12-18	13	12	
	Dec. 8-28	17	8	
	Dec. 29-Jan. 18	30	17	
	Oct. 27-Nov. 2	9	6	
	Nov. 17-Dec. 21	70	51	
	Jan. 5-18	15	14	
	Oct. 27-Dec. 28	18	11	
	Dec. 29-Jan. 18	36	27	
	Jan. 5-11	8	4	
	Nov. 24-30	4	5	
	Oct. 27-Nov. 2	6	5	
	Nov. 17-Dec. 28	75	48	
	Jan. 5-18	23	17	
	Jan. 12-18	3	2	
	Nov. 2-9	29	8	
	Nov. 17-Dec. 7	6	6	
	Jan. 5-11	5	3	
	Nov. 24-Dec. 14	4	4	
	Jan. 5-18	13	10	
	Nov. 2-9	236	192	
	Nov. 17-Dec. 28	428	313	
	Dec. 29-Jan. 18	87	73	
	Oct. 27-Nov. 2	3	1	
	Nov. 24-30	16	5	
	Dec. 15-21	8	1	
	Nov. 17-23	8	4	
	Nov. 2-9	7	4	
	Nov. 17-Dec. 28	54	25	
	Dec. 29-Jan. 18	4	3	
	Nov. 2-Dec. 28	18	14	
	Dec. 8-28	27	19	
	Jan. 5-18	45	34	
	Sept. 29-Oct. 5	2		
	To July 16	3,388	1,054	In civil and military hospitals.
	July 17-Sept. 11	3,479	1,455	In military hospitals, July 5-Aug. 21, 1918: Cases, 884; deaths, 783.
	Sept. 1-20	7	6	
	do	25		Sept. 1-20, 1918: 11 cases on s. s Helena.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Mar. 7, 1919—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
China:				
Amoy	Nov. 24-Dec. 8			Present.
Chungking	Dec. 1-7			Do.
Hongkong	Oct. 26-Dec. 28	2	2	
Ecuador:				
Guayaquil	Nov. 1-Dec. 31	15	3	
Do	Jan. 1-15	7	2	
Taura	Dec. 16-31	1	1	
Egypt				Jan. 1-Nov. 21, 1918: Cases, 35; deaths, 153.
India				Sept. 22-Dec. 28, 1918: Cases, 24,279; deaths, 18,360.
Bombay	Aug. 18-Dec. 28	41	29	
Calcutta	Dec. 22-28		1	
Karachi	Oct. 19-Dec. 31	17	17	
Madras	Dec. 8-21	23	13	
Do	Dec. 29-Jan. 4	123	52	
Madras Presidency	Oct. 13-Dec. 21	930	636	
Do	Dec. 29-Jan. 4	92	48	
Rangoon	Oct. 5-Dec. 21	84	81	
Indo-China:				
Anam	Aug. 1-31	15	10	
Cambodia	do		23	
Cochin-China	do	14	11	
Saigon	Oct. 7-Nov. 24	5	1	
Java:				
East Java				Oct. 7-Nov. 18, 1918: Cases, 78; deaths, 78.
Surabaya (district)	Oct. 7-Nov. 18	61	61	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 14; deaths, 14.
Samarang	Sept. 25-Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16-29	5	2	
Siam:				
Bankok	Sept. 21-28	4	3	
Do	Oct. 5-12	2	2	
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.

SMALLPOX.

Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-18	2		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 22	6		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 10			Do.
Digby	do			Do.
Halifax	Dec. 7-28	10		
Do	Jan. 5-Feb. 15	94		
Middleton	Dec. 29-Jan. 4			Do.
Sydney	Jan. 5-Feb. 15	3		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-Feb. 8	6		
Toronto	Feb. 2-8	1		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-25	12		
Paspebiac	do	2		
Quebec	Dec. 15-21	1		
Do	Dec. 29-Feb. 15	5		
China:				
Amoy	Oct. 13-Dec. 28			Present.
Canton	Nov. 17-23			Do.
Chungking	Nov. 10-Dec. 28			Do.
Foochow	Nov. 24-Dec. 28			Do.
Hongkong	Dec. 15-21	1	1	
Nanking	Dec. 1-28			Do.
Do	Dec. 29-Jan. 11			Do.

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UE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

ed from Dec. 28, 1918, to Mar. 7, 1919—Continued.

SMALLPOX—Continued.

	Date.	Cases.	Deaths.	Remarks.
....	Nov. 1-Dec. 31....	15	4	
....	Nov. 9-Dec. 28....	12	.....	
....	Dec. 29-Jan. 11....	8	.....	
....	Dec. 17-23.....	1	1	
....	Aug. 18-Dec. 28...	35	8	
....	Sept. 29-Dec. 28...	.....	17	Report for week ended Nov. 23, 1918, missing.
....	Dec. 29-Jan. 4....	6	.....	
....	Sept. 29-Dec. 21...	9	2	
....	Oct. 5-Dec. 21.....	52	24	
....	Dec. 29-Jan. 4.....	9	2	
....	Oct. 20-Dec. 21....	32	6	
....	Aug. 1-31.....	29	8	
....	.....do.....	78	40	
....	.....do.....	97	27	
....	Oct. 7-Dec. 22.....	20	5	
....	Aug. 1-31.....	5	.....	
....	Jan. 9-15.....	1	.....	
....	Oct. 26-Dec. 28....	186	46	
....	Dec. 29-Jan. 4.....	37	3	
....	.....	.....	.....	Oct. 7-Nov. 27, 1918: Cases, 21.
....	Oct. 7-Nov. 18....	15	.....	
....	.....	.....	.....	Sept. 25-Nov. 27, 1918: Cases, 164.
....	.....	.....	.....	Oct. 2-Dec. 11, 1918: Cases, 809; deaths, 263.
....	Oct. 2-Dec. 11.....	185	151	
....	Oct. 11-Dec. 13....	288	81	
....	Nov. 24-30.....	1	.....	
....	Sept. 22-Dec. 28...	23	.....	
....	Dec. 29-Jan. 25....	8	.....	
....	Dec. 6-20.....	4	.....	
....	Dec. 28-Feb. 14...	6	.....	
....	.....do.....	4	.....	
....	Dec. 14-20.....	2	.....	
....	Jan. 11-17.....	6	.....	
....	Dec. 21-27.....	1	.....	
....	Jan. 26-31.....	1	.....	
....	Dec. 7-13.....	3	.....	
....	.....do.....	4	.....	
....	Dec. 14-20.....	1	.....	
....	Jan. 26-31.....	3	.....	
....	Feb. 1-7.....	1	.....	
....	Jan. 18-24.....	1	.....	
....	Feb. 9-14.....	1	.....	
....	Feb. 1-7.....	15	.....	
....	.....do.....	.....	.....	Present.
....	Feb. 9-14.....	1	.....	
....	Feb. 1-7.....	40	.....	Bay of Islands.
....	Dec. 7-13.....	4	.....	
....	Jan. 11-17.....	6	.....	Feb. 7, 1919: Present.
....	Dec. 7-13.....	60	.....	Placentia Bay.
....	Feb. 1-7.....	11	.....	
....	Jan. 18-24.....	2	.....	
....	.....	.....	.....	Aug. 1-31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 25, 1919: Cases, 28.
....	Dec. 15-21.....	1	.....	
....	Dec. 29-Jan. 25....	7	.....	
....	Nov. 2-9.....	2	2	
....	Dec. 29-Jan. 11....	2	1	Varioloid, 2.
....	Nov. 16-Dec. 28...	842	.....	
....	.....	.....	.....	July 1-Oct. 31, 1918: 45 fatal cases.
....	Nov. 1-3.....	4	.....	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Mar. 7, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Spain:				
Barcelona	Jan. 9-15		2	
Cadiz	Oct. 1-Dec. 31	18		
Madrid	Sept. 1-Oct. 31	153		
Seville	Nov. 1-30	2		
Valencia	Nov. 10-Dec. 21	40	9	
Do	Dec. 29-Jan. 11	33	4	
Straits Settlements:				
Penang	Oct. 6-12	1		
Union of South Africa:				
Cape Town	Aug. 1-30	1		
Johannesburg	Aug. 1-Oct. 31	12		Nov. 1-30, 1918: Cases, 4.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-30	1		
Austria-Hungary:				
Hungary	Sept. 2-8	2		
Brazil:				
Ceara	Sept. 14-21	1		
China:				
Antung	Dec. 2-15	2		
Do	Jan. 6-12		1	
Colombia:				
Barranquilla	Nov. 8-Dec. 28		3	
Do	Jan. 19-25	1		
Egypt:				
Alexandria	Oct. 14-Dec. 31	85	36	
Do	Jan. 1-14	12	7	
Germany:				
Breslau	Sept. 29-Oct. 19	12	8	
Königsberg	do	3	1	
Mostolten	do	7	2	District of Allenstein.
Great Britain:				
Glasgow	Dec. 22-28	5		
Do	Jan. 5-Feb. 1	8	1	
Greece:				
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-Jan. 4		25	
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-Jan. 19	5	1	
Java:				
East Java				Oct. 7-21, 1918: Cases, 5.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 8.
West Java				Oct. 2-23: Cases, 31; deaths, 6.
Batavia	Oct. 2-23	15	4	
Mesopotamia:				
Bagdad	Oct. 5-11	1		
Mexico:				
Guadalajara	Nov. 1-30	2		
Mexico City	Sept. 22-Dec. 28	434		
Do	Dec. 29-Jan. 25	128		
Netherlands:				
Rotterdam				Jan. 30-Feb. 27, 1919: Cases, 402; deaths, 46.
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 15	23		
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

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LAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Received from Dec. 28, 1918, to Mar. 7, 1919—Continued.

YELLOW FEVER.

	Date.	Cases.	Deaths.	Remarks.
.....	Oct. 1-Nov. 30....	2	1	
.....	Nov. 1-30.....	1	.....	
.....	Jan. 1-15.....	1	.....	
.....	....do.....	1	1	
.....	Nov. 1-Dec. 31....	3	2	
.....	....do.....	163	87	
.....	Jan. 1-15.....	52	30	
.....	Nov. 1-15.....	1	.....	
.....	....do.....	1	1	
.....	Jan. 1-15.....	1	1	
.....	Nov. 1-15.....	1	1	
.....	Jan. 1-15.....	1	1	
.....	Nov. 1-15.....	1	.....	
.....	Nov. 1-30.....	1	.....	
.....	Jan. 9.....	1	.....	
.....	Jan. 30.....	1	.....	At quarantine station, Canal Zone, Panama.

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ear. A list of other recent publications issued by the
ren on page 553.
ed States Public Health Service will be glad to assist
nities desiring to engage in antimosquito activities. If
experienced sanitary engineer officer will be detailed to
communities as to the most practicable measures to be
and to cooperate in supervising the activities carried on.
r such assistance should be made through the State
r.

MALARIA.

OUS HEALTH PROBLEM OF NATION-WIDE CONCERN.

c generally has no conception of the seriousness of
health problem in the United States. Yet it is well
that wherever malaria prevails, and almost in direct
o its prevalence, the population is generally subnormal
nentally, and economically. Since competent authorities
number of cases of malaria occurring annually in the
es at the present time at about six or seven million,
of this disease on the health and welfare of the Nation
der recognition. It is especially important to overcome
with which malaria is still so frequently regarded, mainly

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because it is so seldom fatal. The occurrence of smallpox, t
fever, cholera, or yellow fever rouses to instant activity the
the people, and the health authorities. Yet the ravages of
diseases in this country are as nothing when compared to the
tation wrought by malaria.

This is perhaps not unnatural, for in the case of the first-men
diseases, the events are usually much more dramatic. These di
run a short course and a large proportion of the cases quickl
with death. In the case of malaria the disease runs an insi
chronic course and there are few fatalities. Under these ci
stances, the havoc wrought by malaria is not readily apprecia

At one time malaria was at home in a much greater area
United States than it is to-day. Even in the South, where m
is still prevalent, the disease is diminishing in many localities,
not only to the improved economic state of the farmer, which
possible better housing and a better environment generally, bu
owing to the more extensive cultivation of the land with the
quent better drainage and fewer collections of standing wa
which mosquitoes can breed. The more general use of quinin
household remedy together with a commendable diminution o
in widely advertised patent medicines, is probably also respo
for some of the improvement observed.

Theoretically the control of malaria presents no difficulties
the standpoint of public health officials and sanitary engineer
perhaps no other disease is so much exact scientific knowledge
able. The control of malaria is intimately related to the cont
the Anopheles mosquito. The habits and life history of this mo
are well known and the measures required to exterminate the ins
well established. Practically, however, the problem of malari
trol often presents great difficulties because of the financial
involved. In this connection it must be remembered that m
is seven times as prevalent in rural communities as it is in
and towns; that is to say, the rural communities with only li
populations directly concerned, and therefore, with limited reso
almost invariably face a larger area of mosquito-breeding pla
be dealt with.

When one considers the rôle played by health conditions in
communities in influencing those prevailing in towns and citie
furthermore the relation existing between the health of one p
the United States and that of the Nation as a whole, it become
that the problem of malaria control throughout the United
is one which should be dealt with through the cooperation o
eral, State, and local authorities.

At the present time there are three principal, well-recognized
in this country where malaria may be said to be at home.

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largest area covers the whole southeastern portion of the United States, having for its southern boundary the Gulf of Mexico; for its western boundary a line drawn from Eagle Pass, on the Rio Grande, to Leavenworth, Kans.; for its eastern boundary the Atlantic seaboard; and its northern boundary a line drawn from Leavenworth, Kans., eastward some distance north of the Ohio River and extending to the Atlantic on a line with the northern boundary of Maryland. Of the two smaller endemic areas, one includes a section of the northern part of New Jersey, southeastern New York, Connecticut, Rhode Island, and part of the State of Massachusetts. It is probable that the New England endemic area actually extends southward to the large southern area, of which it is really a part. The third recognized endemic area is in California and includes the Sacramento and San Joaquin Valleys, which occupy a large portion of the central part of the State.

A striking illustration of the disastrous effect of malaria is afforded by the history of the lower peninsula of Virginia. Constituting, as it did, the earliest English settlement in America, and containing, as it does, excellent farming land, it is significant that this region is still practically uninhabited. On many parts of the peninsula there is hardly a family to 3 square miles. Though school histories do not mention the fact, it is on record that Jamestown was abandoned "because of epidemicals."

For the South as a whole it is safe to say that typhoid fever, dysentery, pellagra, and tuberculosis, all together, are not as important as malaria. The reason for this is to be found in the variety of ways in which malaria influences community welfare. There is practically no instance known of a white community thriving where malaria seriously prevails. Those unfamiliar with the disease, and who think of health only in terms of death rates, do not realize that although malaria causes a considerable amount of serious illness requiring the attention of a physician, this is only a small part of its ravages. Much more important are the cases in which the patient does not feel sick enough to go to bed, and, of course, does not consult a physician. These cases are extremely numerous and constitute a large item in the reduction of labor output. Recent surveys in the South show that the crop yield by plantations where malaria prevails is only a fraction of what it normally should be. Just at the time when the crops need most attention, chills and fever keep a large number of laborers from work.

In some sections of the lumber region well-planned malaria-control work has resulted in a marked increase in the output of lumber with practically the same overhead charges.

The prevalence of malaria is most injurious to children, and affecting them, as it does, at the time when they should be getting their growth

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and education, it gives them a permanent handicap in life. C
tent investigators are of the opinion that the backward con
of the school children in the coastal plains of the Carolinas is
entirely due to the prevalence of malaria.

In connection with the fact that the white population is pr
abandon regions where malaria is prevalent, it must be remem
that this causes the disease to have an important sociological infl
especially in the South, for it results in large areas being inh
almost entirely by negroes.

While malaria is primarily a rural disease it concerns cities al
experience has shown that the disease often seriously affec
suburbs. This was well shown in a recent health survey of
where in one suburb, over 25 per cent of the sickness was cau
malaria.

It is well recognized that the prosperity of any section
country is well measured by the amount of freight business
therein by the railroads. Applying this, we find that there i
railroad business in those sections of the South where mal
very prevalent. The trains pass through these regions, but
discharge nor pick up any considerable amount of freight.
this is of immediate concern to the railroads it deserves the
attention of manufacturers, business men, and bankers throu
the country, for it reveals a large area susceptible of pro
economic development.

With the successful demonstrations of what can be accomp
by well-planned antimalaria measures, a concerted effort shou
be made to inaugurate an intensive campaign against mala
enlisting Federal, State, and local governmental support, aid
individual and corporate interests concerned, in eliminatin
health and business liability and in promoting the economic de
ment of the affected regions.

Mr. Governor,
Mr. Mayor,
Mr. Health Officer,
Mr. Manufacturer,
Mr. Banker,
Mr. Railroad President,
Mr. Citizen,

ARE YOU READY TO DO YOUR PART?

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MOSQUITO CONTROL ABOUT CANTONMENTS AND SHIPYARDS.

By J. A. Le Prince, Senior Sanitary Engineer, United States Public Health Service.

When military cantonments were being established during 1917 and 1918 it was realized that it would be insufficient to protect the health of soldiers, sailors, and skilled laborers within the boundary lines of cantonment or industrial plants only, as previous history of sanitation indicates that disease is contracted in municipal and rural areas lacking proper sanitation more frequently than in naval and military reservations having proper facilities for medical and sanitary control. The records of medical and sanitary officers show this to be particularly true of malaria.

As the records of our camps during the Civil and Spanish-American Wars indicated that large numbers of enlisted men were rendered unfit for service after contracting malaria, it was deemed essential to institute malaria campaigns at locations near military cantonments, naval reservations, aviation camps, munition plants, ship-construction yards, and other important war industries. It was realized that the introduction of large forces of labor from malaria-infested regions would produce new conditions at and near cantonment towns that would make extra precautionary measures essential; also that special attention must be devoted to all places where war-industry employees, as well as Army and Navy men, congregated or remained after sundown in potentially malarial districts. There were strong indications of a future shortage of both skilled and unskilled labor, and it was evident that unless precautions were taken to protect these men at their homes, the labor situation would become more serious. There was little danger of malaria being contracted within the cantonment reservations, as the sanitary corps of our Army were prepared to care for these areas, but, as the laborers and many enlisted men were likely to be in the cantonment town and its suburbs after dark, the protective measures were necessary for both classes of men. The important problem then was to do thorough work rapidly in all localities where Navy, Army, and war industry employees were present in numbers after sundown in potentially malarial districts, as well as to prevent mosquitoes from flying into the reservations. In the selection of camp sites, the question of malaria prevalence and control of future epidemics was apparently only one of many requirements to be considered, and, as it was essential to expedite camp construction with all possible speed, the preventive malaria measures had to proceed accordingly.

It was not known in advance how many camps were to be established, when or where they were to be located, nor what force of trained engineers, foremen, and labor would be needed; but it was

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very apparent that as soon as each camp site was approved, quito-control measures and drainage operations should be expe in order to head off malaria transmission in that locality. shortage of efficient labor and the necessity of obtaining funds could be applied immediately were very important items. In cases it was an extremely difficult and slow process to convinc local authorities of the urgent necessity of appropriating nece funds immediately and valuable time was lost, but as a whol support given by the town and county authorities of the Sou States has been very encouraging. It is gratifying to not strong and immediate financial support given to protection of h of our enlisted men by the Chamber of Commerce of Little and all cantonment towns in Mississippi. The mayor and authorities of Jackson, Miss., decided to institute a m campaign whether their proposed camp site was accepted o and have carried on an active and efficient campaign that is a to that town and the State. It was most unfortunate that example was not followed by administrative officers in other ities and States where the efficiency of the citizens could th have been increased at the time when the Nation was calling patriotic citizens to do their utmost.

The malaria and sanitary control measures instituted alon Mississippi Gulf coast from Biloxi to Pass Christian, and the financial support given by the local and county authorities have rapidly made that area practically free from malaria mission, and the local advantages of that residential area will be more apparent to the public at large. It is now the lo known stretch of our southern seacoast practically free from malaria-conveying mosquito, and without doubt this far-sig progressive, and patriotic policy will soon pay well as a fina investment, as it has done in many instances elsewhere.

Local Drainage Problems.

In the environment of some cantonments and war industry the drainage problems have been simple and consisted large rechanneling existing watercourses and of pond control. At o large ditches were necessary and steam shovels were used some cases it was found more economical to install ditches b use of dynamite.

Wilmington, N. C., had an unusual problem. Close to and within the town limits were extensive, abandoned rice fields su to overflow and generally wet. It was necessary to repair or r struct dikes and to use tidal gates to prevent mosquito bree also a large shallow lake with about 6 miles of shore line is w flight range of both the shipyards located there.

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Chattanooga, Tenn., eliminated some former Anopheles' breeding areas by draining ponds to holes dug in the limestone formation where the water was absorbed; also the mosquito breeding in the large spring and lake near Camp Oglethorpe was controlled by using a subaqueous saw to remove the aquatic vegetation that furnished protection for Anopheles larvæ.

At Nashville, Tenn., the stream beds are largely composed of limestone. Where such formation can be economically channeled the cross section of the drainage courses can be largely reduced and oil spraying thereby made less expensive. Where the limestone is hard, it is less costly to clear the stream beds of obstructions and rely on oiling for control.

Near Macon, Ga., were six lakes and a large heavily wooded swampy area with soft silt bottom. Its feeder stream was diverted to the Ocmulgee River by means of a steam-shovel-dug ditch. Ditches were extended into the main swamp, which was several miles long and had but little grade. After deepening these ditches to a certain point, the pressure of the banks would cause the bottom of the ditch to rise. Saplings were used and laid parallel to the banks as a ditch lining or wall to support the banks. Stakes were driven to hold the saplings in place and were then fastened back to living stumps or trees close to the ditch. Later, as the banks dried, the ditch was deepened. The banks became solid and the bottom held to grade. As the silt and mud in this swamp area were too soft to dig to advantage, a large part of the ditching was done by dynamite. Several weeks after the swamp was drained its bottom became very hard. In installing some of the ditches the semiliquid mud was so soft it could be bailed out. Before this work was started we were informed by the local authorities that the project was impossible and had a difficult time obtaining funds for its accomplishment.

The problem near the aviation field at Millington, Tenn., was the removal of drift in several miles of a deep creek bed with low grade. Many of the collections of drift and log jams were 6 to 12 feet high, 50,100 or more feet long, and contained many fallen trees and logs 3 feet or more in diameter. It was expensive, slow, and tedious work.

Near the town of Americus, Ga., Muckalee Creek had to have its center line straightened and years of collection of fallen trees and logs removed in order to keep water off the flat lands adjacent to its banks. During operations a cyclone traveled up the creek bed and increased existing troubles.

Surrounding the cantonment at Jacksonville, Fla., is a sandy formation that will stand only on a very flat slope. The ditching there was made difficult by the presence of the roots of a palm plant.

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These roots are about as thick as one's arm and from them r smaller roots located close together and these make the remo the main root expensive. A large part of the ditching work was done by dynamite. Also in that locality a branch of t John River contains much tightly packed water hyacinth had to be removed.

In the vicinity of Montgomery, Ala., a large part of the di was accomplished by means of a ditching plow drawn by two Mile after mile of ditch was thus installed at a cost of about $ mile. The topography is fairly flat and the soil suitable fo means of ditching. Also some ponds and wet places were drai a porous gravel substratum. The vertical drain holes were from silting up by means of screen entry boxes.

Surrounding the cantonment at Hattiesburg, Miss., are sandy but in the ravines are narrow areas of wet, silt-like forma to 10 feet deep, penetrated by heavy masses of large roots. found too slow and expensive to excavate ditches by handw such places, but drainage was accomplished by blasting ditches and installing side seepage ditches where necessary.

In the Gulfport, Miss., area are a series of hollows parallel Gulf shore line. In some places nine such parallel water-h depressions occur within one mile of the shore line. Most swamps contain a heavy root growth and have but little gra wide bottom ditches have to be used, as the ditches are lon the possible permanent outlets few in number.

At some of the areas in Texas, mosquito breeding is confi storm-water ravines which contain many pot holes, the only of water supply for the cattle in many instances. The reduct the number of holes and the deepening of the remaining o prevent their rapid drying was one method of control.

Near Camp Pike, Ark., some of the stream beds contain bowlders, which made draining of the streams expensive. aviation field in Arkansas, as well as at Lake Charles, La., rice which are probably the most prolific sources of Anopheles, were l within flight range of the cantonments.

At most of the camps construction work was in progress, or were present, when malaria work was started; so, to a large e temporary measures were used at first, and permanent work d rapidly and more or less thoroughly as conditions would all order to get as much quick relief as possible. This work was a panied or followed by complete drainage of areas within flight of districts to be protected.

In order to get an immediate mosquito control in the Hog Shipyard district many acres of cat-tail growth had to be cut

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notoriously malarial sections very little malaria has been by enlisted men, and the malaria sick rate among enlisted up has been very much lower than it would have been ayed at home. The commanding medical officers at the s report mosquitoes as being scarce at nearly all camps, les, seldom seen, except at two of the aviation camps near eas. When the Army and Navy cantonment sick rate published it will undoubtedly be shown that, due to quito-control measures, practically very little, and, in many o malaria has been contracted at camps located in regions alaria.

of the extra-cantonment areas this work has now been two seasons, and many prominent local physicians have e that there has been a remarkable reduction in the malaria the civil population in and near their cantonment towns. stration work, distributed over a wide area, has protected a tion of about 1,750,000, and an average, constantly chang- y and naval population of 800,000, and should lead to a more extended general campaign. Drainage and mosquito k has been accomplished in and near the following can- ies, towns, and villages:

heffield, Tuscumbia, Florence, Anniston, Montgomery.
Little Rock, Lonoke.
cksonville.

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Georgia: Macon, Augusta, Atlanta, Columbus, Americus.
Kentucky: Louisville.
Louisiana: Lake Charles, Alexandria.
Mississippi: Biloxi, Gulfport, Pass Christian, West Point, Hattiesburg, Jac
North Carolina: Charlotte, Raleigh, Fayetteville, Wilmington.
South Carolina: Columbia, Greenville, Spartanburg, Charleston.
Tennessee: Memphis, Millington, Nashville, Chattanooga.
Texas: Dallas, Fort Worth, Houston, San Antonio, Orange.
Virginia: Newport News, Petersburg, Alexandria, Portsmouth, Quantico.

These towns, as well as the counties in which they are l contributed liberally toward mosquito-control measures in o protect our military forces and make camp life pleasant for our and soldiers.

The railroad corporations gave strong support and willing such drainage work as was requested. The local communiti over one-third of the total cost of the work in addition to larg for other sanitary measures. The cost of drainage, oiling, vision, equipment, and transportation averaged about $1.80 p of territory controlled.

The support given by the public of the South and the offici represent them, even in relatively poor and sparsely settled di and results accomplished there, stand out in strong contrast wi ditions yet existing in the environment of some of the New camps, where, beyond the military cantonment lines, no mo control measures were inaugurated. Many of the sentries o duty at our southern camps have told me they very seldom mosquitoes there. The real-estate values close to the south towns near Camp Upton can be doubled by an expenditure of $12 per acre on the brackish marshes near by, but the fact is app not yet appreciated by the property owners and real-estate in

Approximately half of the cantonment towns of the Sout planned to continue mosquito-control measures, and there others to be heard from. Among other benefits that the w brought is a tremendous advance in general sanitation in southern towns and an equally important one in Anophel malaria control.

Corporations establishing branch houses, new industrie developing natural resources in some States are fully aware t absence of mosquitoes has an important bearing on the avail and efficiency of skilled and unskilled labor as well as on the development of real-estate values. The local chambers o merce and the press now appreciate the other commercial tages that follow mosquito eradication measures.

In certain instances where the town officials were under the i sion that the expense of a mosquito drainage campaign would yond their financial ability, they were astounded to discover th

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annual cost of screening houses and screen repairs greatly exceeded the cost of mosquito elimination. They did not realize the fact that it often costs a community, and the citizens of it personally, much more to support a mosquito nuisance than to eliminate it.

The president of a large association of cotton-mill interests has stated that the elimination of mosquitoes near the mill properties has paid a higher return on the money expended than any other investment that the corporation has ever made.

Publications Relating to Malaria, Mosquitoes, and Mosquito Control.

PUBLIC HEALTH BULLETINS.

79. Impounded Water. Surveys in Alabama and South Carolina During 1915 to Determine Its Effect on Prevalence of Malaria. By H. R. Carter, J. A. A. Le Prince, and T. H. D. Griffitts. 1916.

84. Is Mosquito or Man the Winter Carrier of Malaria Organisms? By M. Bruin Mitzmain. December, 1916.

88. Malaria Control: A Report of Demonstration Studies Conducted in Urban and Rural Sections. By R. C. Derivaux, H. A. Taylor, and T. D. Haas.

REPRINTS FROM THE PUBLIC HEALTH REPORTS.

28. Prevention and Destruction of Mosquitoes. By Joseph Goldberger. July 17, 1908.

105. Antimalarial Measures for Farmhouses and Plantations. By H. R. Carter. December 6, 1912.

156. Malaria in North Carolina. By H. R. Carter. December 19, 1913.

160. Malarial Fevers. Prevalence and Geographic Distribution in Arkansas. By R. H. von Ezdorf. January 2, 1914.

170. Prevention of Malaria. Suggestions on How to Screen the House to Keep Out Effectively the Mosquitoes Which Spread the Disease. By R. H. von Ezdorf. February 27, 1914.

172. Malarial Fevers. Prevalence and Geographic Distribution in South Carolina, Georgia, and Florida. By R. H. von Ezdorf. March 13, 1914.

180. Malarial Fevers in the United States. By R. H. von Ezdorf. April 10, 1914.

186. Malarial Fevers. Prevalence and Geographic Distribution in Alabama. By R. H. von Ezdorf. May 1, 1914.

193. Malarial Fever. Prevalence and Geographic Distribution in Mississippi, 1913. By R. H. von Ezdorf. May 22, 1914.

217. Mosquitoes and Malaria. Report on a Short Trip in Eastern North Carolina. By Ch. Wardell Stiles. September 4, 1914.

244. Impounded Water. Some General Considerations on its Effect on the Prevalence of Malaria. By H. R. Carter. December 25, 1914.

248. Impounded Waters. Their Effect on the Prevalence of Malaria. Survey at Blewetts Falls. By H. R. Carter. January 1, 1915.

257. Impounded Waters. A Study of Such Waters on the Coosa River in Shelby, Chilton, Talladega, and Coosa Counties, Ala., to Determine the Extent to Which They Affect the Production of Anophelines, and of the Particular Conditions Which Increase or Decrease Their Propagation. By J. A. A. Le Prince. February 12, 1915.

258. Malaria Control. Drainage as an Antimalarial Measure. By J. A. A. Le Prince. February 19, 1915.

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495. Anopheles Crucians: Habits of Larvæ and Adults. By C. W. Metz. December 6, 1918.

500. Some Aspects of Malaria Control Through Mosquito Eradication. By C. W. Metz. Public Health Reports. January 31, 1919.

SUPPLEMENTS TO THE PUBLIC HEALTH REPORTS.

11. What the Farmer Can Do to Prevent Malaria. By R. H. von Ezdorf. February 13, 1914.

18. Malaria: Lessons on its Cause and Prevention. By H. R. Carter. July 7, 1914.

32. Field Identification of Malaria-Carrying Mosquitoes. By Ernest A. Sweet. October 19, 1917.

Copies of any of these publications may be obtained by addressing the United States Public Health Service, Washington, D. C.

There is also available a malaria poster which is suitable for public display. It indicates preventive and treatment measures, and identifies the malaria mosquito. The poster is printed in two colors, on paper 20 by 16 inches in size.

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SANATORIUM AND HOSPITAL CARE FOR THOSE DISCHARGED FROM MILITARY AND NAVAL SERVICE.

With the enactment by Congress of the law making provision for medical, surgical, and sanatorium care for discharged sick and disabled soldiers, sailors, and marines, the Public Health Service, to which this important work has been entrusted, begins a marked expansion of its hospital activities. Already, with demobilization just begun, the Treasury Department has under its care nearly 2,000 beneficiaries of the war-risk insurance. Within a very short time hospital and sanatorium care will have to be provided for a considerable proportion of the 24,500 soldiers, sailors, and marines discharged from active military and naval service because of tuberculosis and for approximately 50,000 cases of psychoneurosis, epilepsy, and other nervous and mental disorders reported among the military forces up to December 1, 1918.

The law just enacted by Congress carries total appropriations of over $10,000,000. Of this sum approximately $3,000,000 will be used to take over the hospital built by Mr. Hines in Chicago, and to equip and adapt it to the needs and purposes of the Public Health Service. The sum of $1,500,000 is set aside to establish a tuberculosis sanatorium at Dawson Springs, Ky.; nearly $200,000 will be available for enlarging the marine hospital at Stapleton, N. Y.; over half a million dollars is provided for the construction of a hospital in the District of Columbia on Government-owned land; and $900,000 for the construction of a complete hospital unit at Norfolk, Va.

The law sets aside $1,500,000 to be held as an emergency fund to purchase additional lands and buildings in localities to be authorized by the Secretary of the Treasury, and provides $785,000 to conduct the hospitals for the rest of the present fiscal year.

In placing the care of these war-risk insurance cases in the hands of the Public Health Service, Congress evidently saw the advantage of thus unifying Federal hospital activities. The Public Health Service already provides hospital care for merchant seamen, employees of the Mississippi River Commission, for the personnel of the United States Coast Guard Service, the United States Lighthouse Service, and the United States Coast and Geodetic Survey. In addition to this, in recent years it has cared for injured civilian employees of the Federal Government under the Federal compensation act.

In order to reduce the cost of new hospital construction to a minimum, Congress provided that the hospitals at certain Army camps be turned over to the Public Health Service. These include Camp Cody, N. Mex.; Camp Hancock, Ga.; Camp Joseph E. Johns-

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Service.

SEC. 2. There are hereby permanently transferred to the Treasury Department for the use of the Public Health Service for hospital or sanatoria or other uses the following properties, with their present equipment, including sites and leases, or so much thereof as may be required by the Public Health Service, including mechanical equipment in connection therewith, and approaches thereto, with authority to lease or purchase sites not owned by the Government, as follows: Hospitals, with such other buildings and land as may be required, at Camp Cody (New Mexico), Camp Hancock (Georgia), Camp Joseph E. Johnston (Florida), Camp Beauregard (Louisiana), Camp Logan (Texas), Camp Fremont (California), and nitrate plant, Perryville (Maryland), and such hospitals, with other necessary buildings, hereafter vacated by the War Department, as may be required and found suitable for the needs of the Public Health Service for hospital or sanatoria purposes. And for the purpose of such remodeling of or additions to the above-named plants as may be required to adapt them to the needs and uses of the Public Health Service the sum of $750,000 is hereby authorized.

SEC. 3. The Secretary of War is hereby authorized and directed to transfer without charge to the Secretary of the Treasury for the use of the Public Health Service such hospital furniture and equipment, including hospital and medical supplies, motor trucks, and other motor-driven vehicles, in good condition, not required by the War Department, as may be required by the Public Health Service for its hospitals, and the President is authorized to direct the transfer to the Treasury Department of the use of such lands or parts of lands, buildings, fixtures, appliances, furnishings, or furniture under the control of any other department of the Government not required for the purposes of such department and suitable for the uses of the Public Health Service.

SEC. 4. So much of the Battle Mountain Sanatorium at Hot Springs, South Dakota, the National Home for Disabled Volunteer Soldiers, with its present equipment, as is

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not required for the purposes for which these facilities were provided, is hereby made available for the use of the Public Health Service for a period of five years from the approval of this act, unless sooner released by the Surgeon General of the Public Health Service.

SEC. 5. The Secretary of the Treasury is hereby authorized to contract with any existing hospital or sanatorium, by lease or otherwise, for immediate use, in whole or in part, of their present facilities, so as to provide bed capacity and facilities for not exceeding one thousand patients, and for such purposes the sum of $300,000 is hereby authorized.

SEC. 6. The Secretary of the Treasury is hereby authorized, if in his judgment the same will be for the best interests of the Government from the standpoint of cost, location, and of the emergency needs of the Public Health Service, to purchase the site, buildings, and hospital facilities and appurtenances, at Corpus Christi, Texas, known as General Hospital Numbered 15, and for such purpose the sum of $150,000 is hereby authorized.

The sum of $1,500,000 is hereby authorized to be held as an emergency fund for the purchase of land and buildings suitable for hospital and sanatoria purposes, which the Secretary of the Treasury is hereby authorized to select and locate, and to make additions and improvements suitable to adapt them to the uses of the United States Public Health Service, if in his judgment the emergency requires it.

SEC. 7. By the construction of new hospitals and sanatoria, to include the necessary buildings with their appropriate mechanical and other equipment and approach work, including roads leading thereto, for the accommodation of patients, officers, nurses, attendants, storage, laundries, vehicles, and live stock on sites now owned by the Government, or on new sites to be acquired by purchase or otherwise, at the places hereinafter named: *Provided*, That if the Secretary of the Treasury shall make a finding that any hospital project hereinafter specifically authorized is not to the best interest of the Government from the standpoint of cost, location, and of the emergency needs of the Public Health Service, he is hereby authorized to reject such project or projects and to locate, construct, or acquire hospitals at such other locations as would best subserve the interest of the Government and the emergency needs of the Public Health Service within the limits of cost of such authorization.

a. At Cook County, Illinois, by taking over the land and executing the contract for the construction thereon of hospital buildings specified therein of a certain proposed contract executed by the Shank Company, August thirty-first, nineteen hundred and eighteen, and in accordance with such contract and the plans and specifications, identified in connection therewith August thirty-first, nineteen hundred and eighteen, by the signature and initials of Brigadier General R. C. Marshall, junior, Construction Division, Quartermaster Department, United States Army, by Lieutenant Colonel C. C. Wright, and the Shank Company, by George H. Shank, president, at the cost stated therein, namely, $2,500,000, with such changes in said plans and specifications as may be required by the Secretary of the Treasury to adapt said specified buildings to the needs and purposes of the Public Health Service, at a total limit of cost not to exceed $3,000,000.

b. In carrying the foregoing authorization into effect, the Secretary of the Treasury is authorized to execute the contract with The Shank Company hereinbefore specified, with such verbal changes as are made necessary by a change in the contracting officers, and to assume all obligations in said contract contained, and to purchase materials and labor in the open market, or otherwise, and to employ laborers and mechanics for the construction of such buildings and their equipment as in his judgment shall best meet the public exigencies, within the limits of cost herein authorized.

c. At Dawson Springs, Kentucky, on land to be acquired by gift, the necessary buildings for a sanatorium having a capacity of not less than five hundred beds. The sum of $1,500,000 is hereby authorized for the construction of such sanatorium.

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to be immediately available and remain available until expended, the sum of $8,840,000, and for furniture and equipment not otherwise provided for, the sum of $210,000; in all, $9,050,000.

SEC. 10. And the Secretary of the Treasury is hereby authorized, in his discretion, to employ, for service within or without the District of Columbia, without regard to civil-service laws, rules, and regulations, and to pay from the sums hereby authorized and appropriated for construction purposes, at customary rates of compensation, such additional technical and clerical services as may be necessary, exclusively to aid in the preparation of the drawings and specifications for the above-named objects and supervision of the execution thereof, for traveling expenses, and printing incident thereto, at a total limit of cost for such additional technical and clerical services and traveling expenses, and so forth, of not exceeding $210,000 of the above-named limit of cost. All of the above-mentioned work shall be under the direction and supervision of the Surgeon General of the Public Health Service, subject to the approval of the Secretary of the Treasury.

SEC. 11. There is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, for necessary personnel, including regular and reserve commissioned officers of the Public Health Service and clerical help in the District of Columbia and elsewhere, and maintenance. hospital supplies and equipment, leases, fuel, lights, and water, and freight, transportation, and travel, and reasonable burial expenses (not exceeding $100 for any patient dying in hospital), $785,333 for the fiscal year ending June thirtieth, nineteen hundred and nineteen.

Approved, March 3, 1919.

DEATHS DURING WEEK ENDED MARCH 8, 1919, IN CITIES.

The following table shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended March 8, 1919.

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The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown.

The data are taken from the "Weekly Health Index," March 11, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended Mar. 8, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual rate per 1,000.
Albany, N. Y.	112,565	35	16.2	C 19.9	11	5.1
Atlanta, Ga.	201,732	60	15.5	C 16.5	.....	.....
Baltimore, Md.	[2] 669,981	254	19.8	A 20.2	51	4.0
Birmingham, Ala.	197,670	72	19.0	A 17.9	.....	.....
Boston, Mass.	785,245	300	19.9	A 18.9	69	4.6
Buffalo, N. Y.	473,229	162	17.9	C 17.1	20	2.2
Cambridge, Mass.	111,432	36	16.8	A 14.5	4	1.9
Chicago, Ill.	2,596,681	854	17.1	A 17.5	213	4.3
Cincinnati, Ohio.	418,022	217	27.1	C 20.0	107	13.3
Cleveland, Ohio.	810,305	286	18.4	C 12.1	131	[3] 8.4
Columbus, Ohio.	225,296	72	16.7	C 18.1	27	6.2
Dayton, Ohio.	130,655	58	23.1	C 22.3	13	5.2
Denver, Colo.	.....	93	.....	.....	.....	.....
Fall River, Mass.	128,372	52	21.1	C 19.9	12	4.9
Grand Rapids, Mich.	135,450	27	10.4	C 8.5	.....	.....
Indianapolis, Ind.	289,577	80	14.4	C 16.9	.....	.....
Jersey City, N. J.	318,770	122	20.0	C 16.2	.....	.....
Kansas City, Mo.	313,785	141	23.4	C 14.3	47	7.8
Los Angeles, Cal.	568,496	101	9.3	A 13.9	8	0.7
Louisville, Ky.	242,707	174	37.4	C 16.8	88	18.9
Lowell, Mass.	109,081	41	19.6	A 19.0	9	4.3
Memphis, Tenn.	154,759	78	26.3	C 21.6	9	3.0
Milwaukee, Wis.	453,481	123	14.1	A 15.2	.....	.....
Minneapolis, Minn.	383,442	108	14.7	C 11.6	.....	.....
Nashville, Tenn.	119,215	58	25.4	C 17.5	18	7.9
Newark, N. J.	428,684	139	16.9	C 17.4	38	4.6
New Haven, Conn.	154,865	53	17.8	C 12.1	12	4.0
New Orleans, La.	382,273	143	19.5	A 21.2	27	3.7
New York, N. Y.	5,215,879	2,084	20.8	C 17.0	747	7.5
Oakland, Cal.	214,206	47	11.4	A 12.9	.....	.....
Omaha, Nebr.	180,284	41	11.9	C 12.7	.....	.....
Philadelphia, Pa.	1,761,371	631	18.7	[3] 17.9	183	5.4
Pittsburgh, Pa.	593,303	261	22.9	C 17.2	116	10.2
Portland, Oreg.	.....	62	.....	.....	8	.....
Providence, R. I.	263,613	105	20.8	C 15.4	36	7.1
Richmond, Va.	160,719	60	19.5	C 22.1	19	6.2
Rochester, N. Y.	264,856	98	19.3	C 15.4	19	3.7
St. Louis, Mo.	779,951	275	18.4	C 19.9	93	6.2
St. Paul, Minn.	257,099	77	15.6	C 10.1	.....	.....
San Francisco, Cal.	478,530	169	18.4	C 16.8	22	2.4
Seattle, Wash.	.....	73	.....	.....	20	.....
Spokane, Wash.	.....	27	.....	.....	.....	.....
Syracuse, N. Y.	161,404	46	14.9	C 13.9	16	5.2
Toledo, Ohio.	262,231	78	15.5	A 17.2	23	4.6
Washington, D. C.	401,681	156	20.3	A 19.5	38	4.9
Worcester, Mass.	173,650	57	17.1	C 18.0	20	6.0

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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shows the necessity for securing positive and definite laws authorizing action by boards of health in cases requiring the examination and detention of persons suspected of having venereal diseases. The abstract is taken from the weekly advance sheets of the Southwestern Reporter for March 5, 1919, issued by the West Publishing Co.

"One Wragg was arrested charged with lewdness. Bail was fixed, subject, however, to the order of the local board of health, which board subsequently issued an order detaining the accused until it could be ascertained whether he was afflicted with a venereal disease. Wragg then sued out a writ of habeas corpus for his release. The stipulated facts showed that petitioner would be compelled to permit an expert to extract approximately 5 cubic centimeters of blood from petitioner's veins to determine whether he was afflicted with syphilis, such test being known as the 'Wassermann reaction,' and that the petitioner would be further restrained if the expert should report a positive reaction.

"The Supreme Court of Iowa, in an opinion by Judge Weaver in Wragg *v.* Griffin (170 Northwestern Reporter, 400), after determining that neither under the statute law nor under the rules of the board of health could a person merely suspected of having a venereal disease be compelled to submit to such an examination, says: 'Even when charged with the gravest of crimes, one can not be compelled to give evidence against himself, nor can the State compel him to submit to

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a medical or surgical examination, the result of which may tend to convict him of a public offense; and, if there be any good reason why the same objections are not available in a proceeding which may subject him to ignominious restraint and public ostracism, it is at least a safe and salutary proposition to hold that, before the courts will uphold such an exercise of power, it must be authorized by a clear and definite expression of the legislative will.'

"The writ was therefore sustained."

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CAMP DEVENS ZONE, MASS.

Lancaster:
- Measles 2
- Whooping cough 4

CAMP DIX ZONE, N. J.

No cases of communicable disease reported.

CAMP DODGE ZONE, IOWA.

Des Moines:
- Diphtheria 2
- Gonorrhea 9
- Scarlet fever 13
- Smallpox 4
- Syphilis 7

CAMP EBERTS ZONE, ARK.

Chicken pox:
- Ward 1

Influenza:
- Lonoke 2
- Pettus 1

Malaria:
- Ward 1

Pneumonia:
- Ward 1

Septic sore throat:
- Austin, R. F. D. 1
- Ward 1

Tuberculosis, pulmonary:
- Scott, R. F. D. 1

FAYETTEVILLE SANITARY DISTRICT, N. C.

- Influenza 7
- Measles 13
- Pneumonia, broncho 1
- Syphilis 1

Diphtheria:
- Manhattan 11

Influenza:
- Manhattan 17
- Rural 8
- Stockdale 7
- Keats 7
- Cleburne 5
- Junction City 8

Mumps:
- Manhattan 4

Pneumonia:
- Manhattan 2
- Junction City 1

Scarlet fever:
- Manhattan 3
- Army City 1
- Junction City 1

Smallpox:
- Cleburne 4

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Gonorrhea:
- Columbus 5
- Muscogee County 1
- Girard 1

Influenza:
- Muscogee County 1

Measles:
- Columbus 6
- Muscogee County 1

Pellagra:
- Columbus 3

Pneumonia:
- Columbus 2

Scarlet fever:
- Columbus 1
- Muscogee County 1

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CAMP PIKE ZONE, ARK.

Chancroid:	
Little Rock	2
Chicken pox:	
Little Rock	3
North Little Rock	4
German measles:	
Little Rock	1
Gonorrhea:	
Little Rock	10
North Little Rock	1
Influenza:	
Little Rock	17
North Little Rock	1
Cabot	2
Malaria:	
Little Rock	2
Measles:	
Little Rock	5
Mumps:	
Little Rock	11
Pneumonia:	
Little Rock	6
North Little Rock	2
Wrightsville	1
Scarlet fever:	
Little Rock	6
North Little Rock	1
Septic sore throat:	
Scott	2
Smallpox:	
Little Rock	2
Syphilis:	
Little Rock	2
North Little Rock	2
Tuberculosis:	
Little Rock	6
Scott	1

CAMP SHERIDAN ZONE, ALA.

Government clinic:	
Chancroid	1
Gonorrhea	6
Syphilis	19
Montgomery:	
Chicken pox	4
Scarlet fever	1
Tuberculosis	1

CAMP SHERMAN ZONE, OHIO.

Diphtheria:	
Chillicothe	1
Gonorrhea:	
Government clinic	6
Influenza:	
Chillicothe	38
Ross County	37
Mumps:	
Chillicothe	1
Pneumonia, broncho:	
Chillicothe	2
Poliomyelitis, acute:	
Scioto Township	1
Scarlet fever:	
South Union Township	1
Tuberculosis:	
Chillicothe	1

SOUTHER FIELD ZONE, GA.

No cases of communicable disease reported.

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Cerebrospinal meningitis:	
Jefferson County	1
Diphtheria:	
Louisville	7

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J. E. Johnston	....	....	....	1	.....	.....	.....	.....	.....	.....	
Henry Knox	3	....	....	.....	.....	.....	.....	1	.....	.....	
Las Cases	.....	....	....	2	.....	.....	.....	.....	.....	.....	
Lee	4	2	....	31	22	2	4	1	3	1,050.61	72.23
Lewis	10	....	1	40	.....	3	1	1	2	1,091.71	91.69
Meade	4	....	....	76	1	1	.....	1	.....	832.62	113.09
Pike	4	....	1	13	.....	5	1	.....	1	1,450.24	122.41
Sherman	5	....	....	13	.....	18	.....	1	.....	1,062.41	118.39
Taylor	7	....	....	13	7	47	2	1	9	1,222.93	110.94
Travis	14	....	....	8	.....	2	5	1	.....	1,519.08	45.89
Upton	19	....	....	13	1	31	1	1	.....	954.58	31.37
Northeastern Department	.....	....	....	6	2	.....	.....	.....	.....	937.08	22.07
Eastern Department	3	....	....	12	4	21	1	.....	2	807.44	30.39
Southeastern Department	1	....	1	12	3	2	.....	.....	.....	826.38	30.01
Central Department	.....	....	....	2	.....	8	.....	.....	.....	1,162.19	56.56
Southern Department	5	....	1	37	2	54	.....	.....	.....	893.46	18.34
Western Department	1	....	....	5	2	9	.....	.....	.....	629.39	39.36
Aviation camps	1	....	....	29	.....	30	.....	.....	.....	825.02	
Port of embarkation:											
Hoboken	15	....	....	9	7	57	2	.....	.....	3,357.33	162.57
Newport News	9	....	....	75	8	14	8	.....	4	1,252.37	92.71
Alcatraz Disciplinary Barracks	.....	....	....	.....	.....	.....	.....	.....	.....	335.48	16.12
Leavenworth Disciplinary Barracks	13	....	....	4	.....	.....	.....	.....	1	1,779.83	49.25
Columbus Barracks	2	....	....	1	.....	.....	.....	.....	1	1,148.93	45.82
Jefferson Barracks	1	....	....	2	1	2	.....	.....	1	3,177.18	125.59
Fort Logan	.....	....	....	1	.....	.....	.....	.....	1	977.44	30.07
Fort McDowell	.....	....	....	.....	.....	.....	.....	.....	.....	471.29	30.21
Fort Sill	3	....	....	7	7	8	1	.....	.....	694.06	42.08
Fort Slocum	.....	....	....	1	1	.....	.....	.....	.....	280.47	33.44
Fort Thomas	.....	....	....	2	2	.....	.....	.....	.....	865.35	43.87
West Point	.....	....	....	.....	.....	.....	.....	.....	.....	723.42	14.46
Arsenals	3	....	1	8	4	2	.....	.....	.....	581.52	27.14
Miscellaneous small stations	3	....	....	8	.....	5	1	.....	.....	608.09	33.94
Total	189	3	14	670	140	389	63	10	54	1,070.09	64.25

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CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended March 15, 1919.

Alabama.—State totals: Typhoid fever 2, smallpox 41, measles, 40, scarlet fever 4, influenza 53.

Arkansas.—State totals: Influenza 25, diphtheria 15, malaria 27, measles 23, tuberculosis 18, trachoma 10, smallpox 7, scarlet fever 6, chicken pox 5, typhoid fever 3, whooping cough 3, meningitis 1.

California.—Influenza cases reported 257. Smallpox: Cases 28, of which at Marysville 14, Tulare County 2, Chico 4, Butte County 2, balance scattered over State. Typhoid fever: Roseville 1, Sacramento County 1. This does not include San Francisco or Los Angeles from which cities no reports were received.

Connecticut.—Cerebrospinal meningitis, New Haven 1; trachoma, New Britain 2; influenza, State total 204.

Florida.—State totals: Typhoid fever 13, malaria 8, smallpox 3, measles 54, mumps 23, trachoma 33. Two cases meningitis at Jacksonville.

Georgia.—State totals: Acute infectious conjunctivitis 5, cerebrospinal meningitis 2, chicken pox 28, diphtheria 3, dysentery (amebic) 2, dysentery (bacillary) 2, German measles 10, gonorrhea 49, influenza 393, malaria 10, measles 94, mumps 34, pneumonia (acute lobar) 50, poliomyelitis 1, scarlet fever 11, septic sore throat 3, smallpox 62, syphilis 21, tuberculosis (pulmonary) 11, tuberculosis (other than pulmonary) 1, typhoid fever 9, whooping cough 15.

Illinois.—Diphtheria: Cases reported 155, of which in Chicago 123. Scarlet fever: Cases reported 143, of which in Chicago 78, De Kalb, 9, Quincy 6, Oglesby 6, Jacksonville 5. Smallpox: Cases reported 83, of which in Pekin 10, Kingston Mines 10, Chicago 8, Salem 7, Havana 6, Glasford 6. Meningitis: Chicago 2, Belleville 1. Poliomyelitis: Chicago 1. Gonorrhea: State 185. Syphilis: State 75. Influenza: Cases reported 1,622, of which in Chicago 419. Lethargic encephalitis: Cases reported 43, of which in Chicago 28, Evanston 3, Wilmette 2, Breese 1, Martinsville 1, Glencoe 1, Paxton 1, Marseilles 1, Alton 1, Tallula 1, Springfield 1, Olney 1, Versailles Township (Brown County) 1. Recrudescence of influenza noted in the following communities. Bureau County: Gold Township 10. Clark County: York Township 10. Douglas County: Garrett Township 20, Ziegler 28. Jasper County: Smallwood Township 20; South Muddy Township 10. McLean County: Cropsey Township 18, Bloomington 31. Morgan County: Jacksonville precinct 10, Woodson precinct 20. Piatt County: Goose Creek Township 10, Benson 150.

Indiana.—Scarlet fever: Present at Greencastle, Poneto, Marion, South Bend. Smallpox: Present at Anderson, Merrillville, South Bend, Winamac, Plainfield, Crown Point. Measles: Trafalgar, South

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Bend. Diphtheria: Grant County 3, Johnson 2, Tippecanoe 3, present Fountain, Fort Wayne. Typhoid fever: White, Jefferson. Rabies: Clark County 1. State totals: Syphilis 27, gonorrhea 44.

Iowa.—Chancroid: Council Bluffs 1. Chicken pox: Dubuque 2. Diphtheria: Council Bluffs 1, Davenport 1, Des Moines 2, Dubuque 1. Gonorrhea: Cedar Rapids 1, Council Bluffs 12, Davenport 2, Des Moines 5, Dubuque 4, Emmetsburg 1, Forest City 1, Gilmore City 3, Hanford 1, Sioux City 11, Webster City 2. Measles: Bellevue 1, Northwood 7. Mumps: Davenport 1, Northwood 4. Scarlet fever: Bellevue 1, Boone 3, Burlington 2, Council Bluffs 3, Des Moines 15, Dubuque 2, Lester 1, Mason City 1, Wyoming 1. Smallpox: Cedar Rapids 3, Council Bluffs 4, Davenport 13, Des Moines 6, Newton 1, Ottumwa 1, Riverton 1. Syphilis: Des Moines 2, Dubuque 2, Mason City 1, Rockwell City 1, Sioux City 1. In rural districts of following counties. Cerebrospinal meningitis: Chickasaw 1. Diphtheria: Winnebago 6. Gonorrhea: Winneshiek 1. Scarlet fever: Benton 1, Clayton 4, Des Moines 3, Fayette 1, Hancock 3, Humboldt 1, Polk 1, Poweshiek 1, Ringgold 4, Winnebago 1. Smallpox: Des Moines 1. Influenza cases reported in State 295.

Kansas.—Meningitis: Marion 1, Talmo 1, Bison 1. State totals: Smallpox 76, Diphtheria 40, influenza 3,409, scarlet fever 53.

Louisiana.—State totals: Influenza 55, smallpox 40, typhoid fever 12, diphtheria 8, scarlet fever 3.

Maine.—Chicken pox: Auburn 4. Diphtheria: Oldtown 2, Portland 1, Auburn 1, Boothbay Harbor 1, Dresden 1, Eastport 1, Lewiston 1, Presque Isle 2, Rockland 1. German measles: Bath 1. Gonorrhea: Arnold 1, Augusta 2, Bath 1, Calais 1, Lewiston 2, Portland 7, Belfast 1, Biddeford 1, Brighton 2, Columbia Falls 1, Bangor 1, Bradley 1, Dover 2. Measles: Acton 1. Mumps: Bath 1, Farmington 2. Scarlet fever: Oldtown 2, Portland 10, Auburn 1, Readfield 1. Smallpox: Bath 1, Bangor 1, East Livermore 3, Hallowell 1. Syphilis: Bangor 6, Portland 3, Augusta 12. Tuberculosis: State 36. Typhoid fever: Dover 1, Foxcroft 3, Augusta 1. Whooping cough: Madison 1, Portland 2. Influenza: State 93 cases.

Massachusetts.—Unusual prevalence. Measles: Fall River 69 cases. Scarlet fever: Revere 12, Salem 14. Typhoid fever: Rockport 2.

Minnesota.—Smallpox (new foci): Brown County: Sleepy Eye 1. Clearwater County: Bagley village 2. Houston County: Spring Grove village 4. Lake County: Two Harbors 1. Leseuer County: Tyrone Township 1. Wabasha County: Lake City 3. State totals: Cerebrospinal meningitis 1, syphilis 96, gonorrhea 79, chancroid 4.

New Jersey.—Influenza 851, pneumonia 309. No unusual prevalence of other diseases.

New York.—Outside of New York City. Typhoid fever 14, measles 236, scarlet fever 208, whooping cough 41. Diphtheria:

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Cases reported 229, of which in Erie County 53, Sing Sing Prison 61. Smallpox: Batavia 2, Rochester 1. Cerebrospinal meningitis: Rochester 1, Hempstead town 1, Oneonta 1. Pneumonia: Cases reported 71. Voluntary reports: Syphilis 250, gonorrhea 66.

North Carolina.—State totals: Whooping cough 143, measles 266, diphtheria 17, scarlet fever 11, septic sore throat 3, smallpox 89, chicken pox 54, infantile paralysis 1, typhoid fever 6, epidemic meningitis 2, broncho-pneumonia 49, lobar pneumonia 21, bacillary dysentery 1, gonorrhea 18, syphilis 9, chronic gonorrhea 1. Influenza by counties: Clay 33, Cleveland 213, Cumberland 11, Davidson 158, Gaston 11, Stokes 34. Influenza in city of Charlotte 41 cases.

Ohio.—Smallpox: New foci in Warren and Scioto Counties: remaining high in district formerly reported. Scarlet fever: Pleasant Township (Madison County) 7 cases, Cuyahoga Falls 4. Influenza: Cases reported 1,625.

Oregon.—Influenza: Portland 21 cases (4 deaths), Clackamas 1, Hood River 4, Umatilla 6.

South Carolina.—Lethargic encephalitis: Johnsonville (Williamsburg County) 1, Latta (Dillon County) 1.

Vermont.—Seven towns reported 75 cases influenza. No other unusual prevalence.

Virginia.—Cerebrospinal meningitis: Portsmouth 1. Smallpox: Campbell County 1 case, Fairfax 2. Lethargic encephalitis: Middlesex County 1, Lee County 2, Fluvanna County 1. Influenza: Cases reported 141.

Washington.—No unusual prevalence of disease except smallpox, of which cases were reported as follows: Hoquiam 6, Seattle 20, Puyallup 6, Spanaway 4, Roy 3, Yakima County 20, Yakima city 14.

ANTHRAX.

City Reports for Week Ended Mar. 1, 1919.

During the week ended March 1, 1919, one case of anthrax was reported at Camden, N. J., and one case at New York, N. Y.

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CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 15, 1919.

	Cases.
Camp Polk zone, N. C.	1
Camp Zachary Taylor zone, Ky. and Ind.	1
Camp Travis zone, Tex.	1

State Reports for December, 1918, and February, 1919.

Place.	New cases reported.
California (December):	
Los Angeles County—	
Long Beach	1
Los Angeles	1
San Joaquin County	1
San Francisco	4
Solano County	5
Total	12
District of Columbia (February)	3
Florida (February):	
Citrus County	1
Escambia County—	
Pensacola	1
Total	2
Maryland (February):	
Baltimore	14
Anne Arundel County	1
Baltimore County—	
Parksville	1
Back River	1
Total	17
Massachusetts (February):	
Berkshire County—	
Lee (town)	1
Bristol County—	
Fall River	1
New Bedford (town)	1
Massachusetts (February)—Continued.	
Essex County—	
Lawrence	2
Lynn	1
Peabody	1
Middlesex County	1
Hudson (town)	1
Malden	1
Newton	1
Somerville	1
Norfolk County—	
Braintree (town)	4
Plymouth County—	
Brockton	1
Whitman (town)	1
Suffolk County—	
Boston	4
Worcester County—	
Northboro (town)	1
Webster (town)	1
Worcester	1
Total	25
Nebraska (February):	
Gage County	1
Wisconsin (February):	
Brown County	1
Dodge County	1
Milwaukee County	5
Shawano County	1
Total	8

City Reports for Week Ended Mar. 1, 1919.

Place.	Cases.	Deaths.
Akron, Ohio	1	
Arlington, Mass.	1	
Austin, Tex	1	1
Baltimore, Md	4	3
Beatrice, Nebr	1	1
Beaumont, Tex		1
Birmingham, Ala	3	2
Boston, Mass	1	
Brunswick, Ga		1
Chicago, Ill	1	1
Cincinnati, Ohio	1	
Dedham, Mass	1	
Detroit, Mich	1	
Greenville, S. C	1	
Highland Park, Mich	1	
Holland, Mich		1
Houston, Tex	1	1
Indianapolis, Ind		1
Kansas City, Mo		1
Lancaster, Ohio		1
Lorain, Ohio		1
Los Angeles, Cal	1	
Lynn, Mass	1	
Milwaukee, Wis	2	2
Nashville, Tenn	1	1
Newark, N. J	1	
Newton, Mass	1	1
New York, N. Y	7	3
Ogden, Utah	1	1
Passaic, N. J	1	1
Philadelphia, Pa	3	1
Piqua, Ohio	1	1
Portland, Oreg		1
Roanoke, Va		1
St. Louis, Mo	1	1
San Antonio, Tex	1	1
San Francisco, Cal	2	
Somerville, Mass		1
Troy, N. Y	1	
Washington, D. C	1	
Wichita, Kans	1	
Worcester, Mass		1

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Camp Jackson zone, S. C.	8
Camp Lee zone, Va.	2
Muscle Shoals sanitary district, Ala.	21
Picric Acid Plant zone, Ga.	5
Tidewater health district, Va.	29
Camp Travis zone, Tex.	16
Wilmington sanitary district, N. C.	1

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 15, 1919.

	Cases.
Charleston sanitary district, S. C.	6
Camp Eberts zone, Ark.	3
Fayetteville sanitary district, N. C.	7
Camp Funston zone, Kans.	52
Gas and Flame School zone, Ga. and Ala.	1
Camp Gordon zone, Ga.	21
Gulfport health district, Miss.	10
Camp A. A. Humphreys zone, Va.	24
Camp Lee zone, Va.	1
Muscle Shoals sanitary district, Ala.	8
Picric Acid plant zone, Ga.	4
Camp Pike zone, Ark.	20
Portsmouth and Norfolk County health district, Va.	9
Camp Sherman zone, Ohio.	75
Camp Zachary Taylor zone, Ky. and Ind.	789
Camp Travis zone, Tex.	7
Wilmington sanitary district, N. C.	3

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Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baton Rouge, La	3		Long Branch, N. J	2	
Joplin, Mo	1		Memphis, Tenn	1	
Kansas City, Mo		1	Tuscaloosa, Ala	1	
Little Rock, Ark	1				

MEASLES.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 581.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 15, 1919.

	Cases.		Cases.
Camp Devens zone, Mass	2	Camp Pike zone, Ark	5
Fayetteville sanitary district, N. C	13	Camp Polk zone, N. C	4
Gas and Flame School zone, Ga. and Ala	7	Camp Zachary Taylor zone, Ky. and Ind	23
Camp Gordon zone, Ga	23	Tidewater health district, Va	1
Gulfport health district, Miss	4	Camp Upton zone, N. Y	1
Camp Jackson zone, S. C	1	Wilmington sanitary district, N. C	3
Picric acid plant zone, Ga	5		

PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 15, 1919.

	Cases.		Cases.
Gas and Flame School zone, Ga. and Ala	3	Picric Acid plant zone, Ga	1
Muscle Shoals sanitary district, Ala	1		

State Reports for December, 1918, and February, 1919.

Place.	New cases reported.	Place.	New cases reported.
California (December):		Massachusetts (February):	
Los Angeles County—		Essex County—	
Los Angeles	2	Haverhill	1
Long Beach	1		
Total	3	Vermont (February):	
		Chittenden County	1
Florida (February):			
Jacksonville	1		

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City Reports for Week Ended Mar. 1, 1919.

	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
Adrian, Mich.	2	3		
Akron, Ohio.	7			
Ann Arbor, Mich.	1	1		
Arlington, Mass.	1	1		
Atlanta, Ga.			1	12
Atlantic City, N. J.	1	1		
Auburn, N. Y.	1	1		
Austin, Tex.	1	1		
Baltimore, Md.	17	22		
Baton Rouge, La.			3	1
Bayonne, N. J.	1			
Beverly, Mass.	1	3		
Bloomfield, N. J.			1	1
Bluefield, W. Va.	1			
Boston, Mass.	52	22		
Brockton, Mass.	1			
Brookline, Mass.	2	3		
Cambridge, Mass.	2			
Camden, N. J.	16			
Charleston, W. Va.	2	3		
Chelsea, Mass.	3	2		
Chicago, Ill.			451	138
Cleveland, Ohio.	47	40		
Coffeyville, Kans.	1			
Colorado Springs, Colo.	1	1		
Cranston, R. I.	1	1	3	3
Dayton, Ohio.	4	4		
Detroit, Mich.	22	36	34	87
East Orange, N. J.			4	1
Elizabeth, N. J.	4	6		
Elmira, N. Y.	5	6		
Englewood, N. J.	1	1		
Everett, Mass.	2	1		
Fall River, Mass.	3			
Findlay, Ohio.	11			
Flint, Mich.	3	1		
Geneva, N. Y.	1	1		
Grand Rapids, Mich.	10	1		
Green Bay, Wis.	1	1		
Greenwich, Conn.	1			
Hackensack, N. J.			1	
Harrison, N. J.	1			
Hartford, Conn.	2	3		
Haverhill, Mass.	3	1		
Highland Park, Mich.	9	3		
High Point, N. C.	9			

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Montclair, N. J.	1			
Morgantown, W. Va.	1			
Morristown, N. J.			2	2
Mount Vernon, N. Y.	5	1		
Nashville, Tenn.	1	5		
Natick, Mass.	2	1		
Newark, N. J.	50	20		
New Bedford, Mass.	3			
New Britain, Conn.	1			
Newburgh, N. Y.	1	1		
New London, Conn.	1	3		
New York, N. Y.		303	504	539
Norfolk, Va.	2	3		
North Adams, Mass.	2	1		
North Tonawanda, N. Y.	2	1		
Oklahoma City, Okla.			4	3
Orange, N. J.	1	2		
Ossining, N. Y.	4	2		
Parkersburg, W. Va.	2	2		
Passaic, N. J.	5	3		
Peoria, Ill.			7	7
Perth Amboy, N. J.			4	2
Philadelphia, Pa.	200	80		
Pine Bluff, Ark.	2			
Pontiac, Mich.	4			
Port Chester, N. Y.	25			
Reno, Nev.	2	3		
Richmond, Va.	1	8		
Roanoke, Va.	6	2		
Rochester, N. Y.	10	2		
Salem, Mass.	2	4		
San Antonio, Tex.	9	5		
San Diego, Calif.	1	1		
Sandusky, Ohio.	11	2		
San Francisco, Calif.	6	4		
Schenectady, N. Y.	1	1		
Somerville, Mass.	3	2		
Springfield, Mass.	12	7		
Taunton, Mass.	2	2		4
Troy, N. Y.	2	1		
Westfield, Mass.	1			
Wichita, Kans.	4	1		
Wilmington, Del.	7	7		
Winchester, Mass.	1	1		
Worcester, Mass.	9	3		
Youngstown, Ohio.	1			

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RABIES IN ANIMALS.

City Reports for Week Ended Mar. 1, 1919.

Place.	Cases.	Place.	Cases.
Akron, Ohio	2	Kansas City, Mo.	2
Baton Rouge, La.	1	Memphis, Tenn.	1
Detroit, Mich.	1	Rochester, N. Y.	1
Greenwich, Conn.	7		

SCARLET FEVER.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 581.

Cases Reported in Extra-Cantonment Zones Week Ended Mar. 15, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	13	Portsmouth and Norfolk County health district, Va.	1
Camp Funston zone, Kans.	5	Camp Sheridan zone, Ala.	1
Gas and Flame School zone, Ga. and Ala.	2	Camp Sherman zone, Ohio	1
Camp Gordon zone, Ga.	11	Camp Zachary Taylor zone, Ky. and Ind.	11
Camp Pike zone, Ark.	7		

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SMALLPOX—Continued.

State Reports for December, 1918, and February, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Wisconsin (February):						
Ashland County	5					
Brown County	9				3	6
Calumet County	1					1
Clark County	2				2	
Dane County	10		10			
Douglas County	10			3	7	
Dunn County	1					1
Fond du Lac County	2					2
Forest County	7				7	
Green Lake County	7		1		1	
Jackson County	11				11	
Jefferson County	1		1			
Juneau County	1					
Marinette County	11				11	
Milwaukee County	12				1	1
Oconto County	3		2			1
Outagamie County	2			1	1	
Portage County	1		1			
Price County	4		4			
Racine County	8		8			
Richland County	1				1	
Rock County	6				6	
Rusk County	2				2	
Shawano County	4				3	1
Vilas County	4			1	2	1
Washburn County	2				2	
Winnebago County	2		1			1
Wood County	1					
Total	130		28	5	60	37

Nebraska Report for February, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Nebraska:			Nebraska—Continued.		
Adams County	1		Phelps County	2	
Blaine County	5		Richardson County	1	
Deuel County	1		Saunders County	26	
Douglas County	62		Seward County	4	
Gage County	2		Wayne County	17	
Jefferson County	2		Total	178	
Lancaster County	55				

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SMALLPOX—Continued.

City Reports for Week Ended Mar. 1, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Adrian, Mich	2		Los Angeles, Calif	2	
Atchison, Kans	6		Louisville, Ky	2	
Atlanta, Ga	29		Marinette, Wis	4	
Baltimore, Md	1		Marshalltown, Iowa	7	
Beatrice, Nebr	1		Memphis, Tenn	2	
Bedford, Ind	2		Middletown, Ohio	2	
Beloit, Wis	2		Milwaukee, Wis	3	
Billings, Mont	1		Minneapolis, Minn	12	
Brunswick, Ga	1		Mobile, Ala	7	
Butte, Mont	4		Nashville, Tenn	5	
Cairo, Ill	1		New Orleans, La	3	
Cedar Rapids, Iowa	6		Norfolk, Va	3	
Centralia, Ill	1		North Yakima, Wash	37	
Chanute, Kans	5		Oakland, Calif	2	
Cincinnati, Ohio	7		Ogden, Utah	17	
Cleveland, Ohio	6		Oklahoma City, Okla	14	
Columbus, Ohio	1		Omaha, Nebr	25	
Council Bluffs, Iowa	1		Pekin, Ill	16	
Dallas, Tex	7		Peoria, Ill	7	
Davenport, Iowa	4		Portland, Oreg	23	
Denver, Colo	9		Portsmouth, Va	1	
Detroit, Mich	7		Racine, Wis	1	
Duluth, Minn	3		Raleigh, N. C	1	
Durham, N. C	1		Roanoke, Va	3	
Elgin, Ill	1		Sacramento, Calif	2	
Flint, Mich	1		St. Cloud, Minn	1	
Fort Dodge, Iowa	6		St. Joseph, Mo	3	
Fort Wayne, Ind	4		St. Paul, Minn	25	
Fort Worth, Tex	7		Salt Lake City, Utah	4	
Grand Rapids, Mich	1		San Antonio, Tex	6	
Great Falls, Mont	1		San Francisco, Calif	16	
Greenville, S. C	2		Seattle, Wash	21	
Harrisburg, Pa	1		Sioux City, Iowa	1	
Highland Park, Mich	1		South Bend, Ind	3	
Hoquiam, Wash	1		Springfield, Ill	5	
Houston, Tex	2		Steubenville, Ohio	2	
Hutchinson, Kans	1		Superior, Wis	4	
Kalamazoo, Mich	2		Tacoma, Wash	11	
Kansas City, Kans	2		Tiffin, Ohio	1	
Kansas City, Mo	8		Toledo, Ohio	2	
Kokomo, Ind	1		Washington, D. C	1	
Lexington, Ky	2		Winston-Salem, N. C	17	
Lincoln, Nebr	13		Youngstown, Ohio	1	
Lorain, Ohio	1		Zanesville, Ohio	1	

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 15, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	7	Muscle Shoals sanitary district, Ala	11
Fayetteville sanitary district, N. C	1	Picric Acid plant zone, Ga	4
Gas and Flame School zone, Ga. and Ala	8	Camp Pike zone, Ark	4
Camp Gordon zone, Ga	7	Camp Sheridan zone, Ala	19
Gulfport health district, Miss	1	Camp Zachary Taylor zone, Ky. and Ind	24
Camp Jackson zone, S. C	15	Tidewater health district, Va	4
Camp Lee zone, Va	1	Camp Travis zone, Tex	2

TETANUS.

City Reports for Week Ended Mar. 1, 1919.

During the week ended March 1, 1919, there was one death from tetanus reported at each of the following-named places: Mobile, Ala.; New Orleans, La.; Philadelphia, Pa.; and St. Louis, Mo.

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nty	1
nty	1
s County	7
bra	2
Beach	1
geles	13
ounty	1
County—	
	1
sco	4
a County	1
o County—	
ento	2
	35
mbia (February)	4
ary):	
ty—	
	4
unty	1
nty	1
nville	3
County—	
ola	2
County	1
	1
unty—	
est	1
y	1
ounty	2
unty	3
	20
ruary):	
	23
ounty—	
y Hospital	1
del County—	
olis	3
County—	
	1
	1
Middleboro	1
Charles County—	
Port Tobacco	1
Frederick County—	
Walkersville	4
Walkersville, R. D.	1
Brunswick	1
Chestnut Grove, R. D.	1
Frederick, R. D.	1
Petersville	1
Montgomery County—	
Beallsville	1
Monrovia, R. D	1
Somerset County—	
Tylerton	4
Washington County—	
Boonsboro, R. D.	1
Hagerstown	1
Wicomico County—	
Salisbury, R. D	1
Total	52
Massachusetts (February):	
Bristol County—	
Fall River	4
Essex County—	
Gloucester	2
Haverhill	1
Lawrence	25
Lynn	1
Rockport (town)	2
Hampden County—	
Springfield	3
Hampshire County—	
Amherst (town)	1
Northampton	4
Middlesex County—	
Everett	1
Lowell	2
Medford	1
Natick (town)	4
Newton	1
Waltham	2
Watertown (town)	1

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	1	
Baltimore, Md	4	2
Bluefield, W. Va	1	
Boston, Mass	3	
Buffalo, N. Y	4	1
Butler, Pa	3	
Camden, N. J	1	
Charleston, S. C	1	
Chicago, Ill	2	
Cincinnati, Ohio	1	
Cleveland, Ohio	1	
Columbia, S. C	1	
Columbus, Ohio	1	
Covington, Ky		1
Dallas, Tex		1
Davenport, Iowa	1	
Elizabeth, N. J	1	
Everett, Mass	2	
Fort Worth, Tex		1
Hibbing, Minn	1	
Houston, Tex	2	
Ironton, Ohio	2	
Lackawanna, N. Y	1	
Lancaster, Ohio	1	
Lancaster, Pa	1	
Lawrence, Mass	6	
Leominster, Mass	1	
Louisville, Ky		1
Memphis, Tenn	1	
Middletown, Ohio	1	
Milwaukee, Wis	1	
Montgomery, Ala	1	
Newark, N. J	2	1
New York, N. Y	10	1
Oakland, Calif	1	
Olean, N. Y		1
Philadelphia, Pa	2	2
Phillipsburg, N. J	1	
Reading, Pa	1	
Richmond, Va	1	
Riverside, Calif	2	1
Rockford, Ill	1	
Sacramento, Calif		1
St. Louis, Mo	1	
St. Paul, Minn	1	
San Francisco, Calif	2	
South Bend, Ind		1
Springfield, Ill		1
Springfield, Mass	1	1
Syracuse, N. Y		1
Tuscaloosa, Ala	1	
Wausau, Wis	1	2
Wilmington, Del		1
Wilmington, N. C	1	1

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for December, 1918, and February, 1919.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
Arizona (February)		26	1	Maryland (February)	161	335	599
California (December)	220	31	127	Massachusetts (February)	679	452	561
District of Columbia (February)	137	6	58	Nebraska (February)	37	36	50
Florida (February)	27	169	16	Vermont (February)	9	118	85
				Wisconsin (February)	105	566	319

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Dubuque, Iowa	40,096						1			
Duluth, Minn	97,077	28			5		1		2	
Durham, N. C	26,160								5	1
East Chicago, Ind	30,286	10								2
Easthampton, Mass	10,656	1								
Easton, Pa	30,854				9				2	
East Orange, N. J	43,761	9	2				1			
Elgin, Ill	28,562	11			1		1		2	2
Elizabeth, N. J	88,830		7		1		1		6	2
Elmira, N. Y	38,272	30		1	6		1			1
Englewood, N. J	12,603	6	2							
Erie, Pa	76,592		4		1		1		10	
Eureka, Cal	15,142	3								
Evanston, Ill	29,304	5	3							
Everett, Mass	40,160	4	7	1	1				1	
Everett, Wash	37,205				1		5			
Fairmont, W. Va	16,111		1		1					
Fall River, Mass	129,828	31	5		33		4		6	
Fargo, N. Dak	17,872	8			1		5			1
Findlay, Ohio	[1] 14,858	6			10					2
Flint, Mich	57,386	16	2				3			
Fond du Lac, Wis	21,486	11	1				1			
Fort Scott, Kans	10,564	2								
Fort Wayne, Ind	78,014	38	3		2				4	1
Fort Worth, Tex	109,597	21			5				1	
Fostoria, Ohio	10,956	6								
Framingham, Mass	14,149	8							1	
Frederick, Md	11,225	6					2			
Freeport, Ill	19,844	13								
Fremont, Nebr	10,080	7								
Fremont, Ohio	11,034	2	1						1	
Galesburg, Ill	24,629	19			8					
Galveston, Tex	42,650	13	1							3
Geneva, N. Y	13,915	3					1			
Gloversville, N. Y	22,314									1
Grand Forks, N. Dak	16,342	6								
Grand Rapids, Mich	132,861	37	5		12		2		9	2
Great Falls, Mont	[1] 13,948	16			12					
Green Bay, Wis	30,017	11					2		2	1
Greenfield, Mass	12,251	2								
Greensboro, N. C	20,171	10								2
Greenville, S. C	18,574	5							1	
Greenwich, Conn	19,594						4			
Hackensack, N. J	17,412	4	1		1					1
Hammond, Ind	27,016	13		1						

[1] Population Apr. 15, 1910.

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	305,816	165	4	1	18	1	7	3	.....	10
	10,725	5	.....	.....	.....	.....	.....	.....	.....	.....
	32,833	12	.....	.....	37	.....	8	.....	1	.....
	59,112	.....	1	.....	3	.....	.....	.....	1	1
	21,929	10	.....	.....	1	.....	4	.....	.....	1
Y	16,219	6	.....	.....	2	.....	.....	.....	.....	.....
	31,833	12	2	.....	.....	.....	.....	.....	.....	2
	21,481	9	.....	.....	.....	.....	3	.....	.....	.....
	23,813	16	1	.....	.....	.....	.....	.....	.....	.....
	16,086	9	.....	.....	5	.....	3	.....	1	.....
	51,437	.....	4	.....	217	.....	.....	.....	.....	.....
	12,313	1	.....	.....	.....	.....	.....	.....	.....	.....
	13,477	2	.....	.....	1	.....	.....	.....	.....	.....
	102,923	25	.....	.....	.....	.....	2	.....	2	2
s	21,365	4	.....	.....	8	.....	1	.....	.....	1
	41,997	24	1	.....	2	.....	.....	.....	4	1
	37,145	5	.....	.....	1	.....	3	.....	.....	.....
	46,957	14	1	.....	1	.....	1	.....	.....	.....
	58,716	13	.....	.....	1	.....	4	.....	2	2
	20,028	8	.....	.....	21	.....	.....	.....	3	1
	21,338	7	.....	.....	.....	.....	.....	.....	.....	.....
	29,163	16	.....	.....	.....	.....	1	.....	.....	1
J	15,733	5	1	1	.....	.....	.....	.....	.....	.....
	38,266	15	1	1	10	.....	.....	.....	.....	1
	535,485	147	9	.....	6	.....	7	.....	38	25
	240,808	.....	6	.....	2	.....	5	.....	1	14
	114,366	52	7	1	2	.....	7	.....	7	5
	33,497	10	.....	.....	.....	.....	.....	.....	.....	3
	104,534	43	4	.....	4	.....	4	.....	2	1
	31,315	10	.....	.....	46	.....	3	.....	1	.....
	52,243	7	2	1	1	.....	3	.....	3	1
n	15,859	.....	.....	.....	2	.....	5	.....	.....	.....
I	79,607	18	2	.....	.....	.....	.....	.....	9	2
	13,931	3	.....	.....	.....	.....	3	.....	.....	.....
	[1] 10,365	.....	1	.....	2	.....	.....	.....	.....	.....
	[1] 14,610	5	.....	.....	5	.....	.....	.....	.....	1
	19,923	6	.....	.....	1	.....	8	.....	.....	.....
	15,285	4	.....	.....	.....	.....	.....	.....	.....	.....
	12,555	2	1	.....	.....	.....	.....	.....	1	1
wa	14,519	3	.....	.....	.....	.....	.....	.....	.....	.....
Va	12,984	.....	.....	.....	5	.....	.....	.....	.....	.....
hio	10,135	2	3	2	.....	.....	.....	.....	.....	.....
a	14,938	7	.....	.....	.....	.....	.....	.....	.....	.....
	26,681	5	1	.....	1	.....	.....	.....	.....	.....

[1] Population Apr. 15, 1910.

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New Brunswick, N. J.	25,855				3		3		1	
Newburgh, N. Y.	29,893	11							5	1
Newburyport, Mass.	15,291	10	1				1		1	1
New Castle, Pa.	41,915						2			
New Haven, Conn.	152,275	49	4	1	12		1		3	2
New London, Conn.	21,799	9	5				2		1	
New Orleans, La.	377,010	163	2		1		4		27	22
Newport, Ky.	32,133	16					1			
Newport, R. I.	30,585	6					1			
Newton, Mass.	44,345	11			2				1	
New York, N. Y.	5,737,492	2,157	356	45	54	1	182	4	258	187
Niagara Falls, N. Y.	38,466	14	3							
Norfolk, Va.	91,148		1		5		3		2	2
Norristown, Pa.	31,969				2				1	
North Adams, Mass.	[1] 22,019	4							3	
Northampton, Mass.	20,006	7	4	1			1			1
North Attleboro, Mass.	11,248	1								
North Tonawanda, N. Y.	14,060	7			4					
North Yakima, Wash.	22,058		2				4			
Norwalk, Conn.	27,332								2	1
Norwich, Conn.	21,923	1	2						2	1
Oakland, Cal.	206,405		10				4		7	6
Oak Park, Ill.	27,816	9	1		4					
Ogdensburg, N. Y.	16,845	6								
Ogden, Utah	32,343	6	2							
Oil City, Pa.	20,162		1		1					
Oklahoma City, Okla.	97,588	18	5	1	8		5		1	1
Olean, N. Y.	16,927	5								
Omaha, Nebr.	177,777	40	5	1	8		10			5
Orange, Conn.	14,393	14	2	1						1
Oshkosh, Wis.	36,549	13								2
Ossining, N. Y.	14,064	11	2	1			1		2	1
Parkersburg, W. Va.	21,059	6			1					
Pasadena, Cal.	49,620	12							2	2
Passaic, N. J.	74,478	26	3						7	1
Peekskill, N. Y.	19,034	4								
Pekin, Ill.	10,973		1		1		1			
Peoria, Ill.	72,184	21	3				1			1
Perth Amboy, N. J.	42,646	10							5	2
Philadelphia, Pa.	1,735,514	682	78	11	27		77		87	66
Phillipsburg, N. J.	15,879				1				1	
Pine Bluff, Ark.	17,777						1			
Piqua, Ohio	14,275		1	1					1	
Pittsburgh, Pa.	586,196		21		4		14		23	
Pittsfield, Mass.	39,678	11								
Plainfield, N. J.	24,330	4			1		3			1
Plymouth, Mass.	14,001	2								

[1] Population Apr. 15, 1910.

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Rocky Mount, N. C.	12,673	7								
Rome, N. Y.	21,259				2				2	
Rutland, Vt.	15,038	4								
Sacramento, Cal.	68,934	27	1				1		2	6
Saginaw, Mich.	56,469	23	2				3			1
St. Cloud, Minn.	12,013		1							
St. Joseph, Mo.	86,498	42	3		1		6			2
St. Louis, Mo.	768,630	257	39		11		7		30	14
St. Paul, Minn.	252,465	61	5	1	9		10	1	13	4
Salem, Mass.	49,346		3				2			1
Salem, Oreg.	21,274	17					1			1
Salt Lake City, Utah.	121,623	31	4				7	1		1
San Angelo, Tex.	[1] 10,321	5								3
San Antonio, Tex.	128,215	14	2		4				10	8
San Bernardino, Cal.	17,616	5								4
San Diego, Cal.	56,412	17			1				4	4
Sandusky, Ohio.	20,226	11							1	
San Francisco, Cal.	471,023	183	16	2	3		2		87	29
San Jose, Cal.	39,810		1							
Santa Barbara, Cal.	15,360	4								1
Santa Cruz, Cal.	15,159	1								
Saratoga Springs, N. Y.	13,839	8							3	
Saugus, Mass.	10,210	3					1		1	1
Sault Ste. Marie, Mich.	14,130	5							1	
Schenectady, N. Y.	103,774	27	3	1					7	
Scranton, Pa.	149,541		4				2		12	
Seattle, Wash.	366,445		5		14		21			
Sharon, Pa.	19,156								1	
Sioux City, Iowa.	58,568		1				2			
Somerville, Mass.	88,618	33	7	1	6		10		3	2
South Bend, Ind.	70,937	13	1		64		1			2
Southbridge, Mass.	14,465	4	2							1
Spartanburg, S. C.	21,985	7			1					1
Springfield, Ill.	62,623	27	2				3			2
Springfield, Mass.	108,668	39	2		1		2		3	2
Springfield, Mo.	41,169	16								
Springfield, Ohio.	52,296	17			25		2		5	1
Steelton, Pa.	15,759				1				1	
Steubenville, Ohio.	28,259	17	3							
Stillwater, Minn.	[1] 10,193		2							
Stockton, Cal.	36,299	7	2							
Streator, Ill.	14,313	3					1			
Superior, Wis.	47,167	14					1			1
Syracuse, N. Y.	158,559	67	8		2		11		3	5

[1] Population Apr. 15, 1910.

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FOREIGN.

BRAZIL.

Influenza—Mortality, October-November, 1918—Rio de Janeiro.[1]

A recent report of the director of public health gives the statistics of mortality from influenza at Rio de Janeiro during the months of October and November, 1918, the period when the epidemic reached its greatest prevalence, as follows: October, 1918, total deaths from influenza, 8,676 (general mortality, 11,291); month of November, 1918, total deaths from influenza, 3,277 (general mortality, 5,705). These statistics are stated to be approximate only.

The director of public health estimates that about 600,000 persons out of a population of 915,000 (estimated) were affected with influenza.

CHINA.

Examination of Rats—Hongkong.

During the four weeks ended January 25, 1919, 6,612 rats were examined at Hongkong. No plague infection was found.

Influenza—Amoy.

Epidemic influenza, occurring in the native and foreign population, was reported during the month of January, 1919, at Amoy, China.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Diseases.	Feb. 1 10, 1919.		Remaining under treatment Feb. 10, 1919.
	New cases.	Deaths.	
Diphtheria	5		2
Leprosy			17
Malaria	22		[1] 66
Paratyphoid fever			6
Scarlet fever	1		1
Typhoid fever	3	4	[2] 21

[1] From the interior, 37. [2] From the interior, 11.

Influenza—Habana—Regla.

During the period from February 1 to 10, 1919, 80 cases of influenza with 69 fatalities were notified at Habana and 8 cases at Regla.

[1] Public Health Reports, Jan. 10, 1919, p. 64.

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JAPAN.

Epidemic Smallpox—Kobe.

Epidemic smallpox has been reported present at Kobe, Japan, with 182 cases and 40 fatalities occurring during the four weeks ended January 25, 1919.

MACEDONIA.

Typhus Fever.

Typhus fever was reported prevalent in Macedonia, March 17, 1919. The disease was stated to be traceable to refugees returning from Bulgaria, especially those from Varna and other Black Sea ports. A number of cases were reported present at Drama, but without spread of the disease. At Kavala about 300 cases were officially reported.

NETHERLANDS.

Influenza—Acute Respiratory Diseases—Mortality, July–October, 1918.

Reports of influenza in the Netherlands show the occurrence of 815 fatal cases during the period July to September, 1918, inclusive, viz, 98 in July, 534 in August, and 183 in September; and 3,017 during the month of October, 1918, the population, December 31, 1917, being estimated as 6,724,663. During the same period, mortality from other acute respiratory diseases was reported as follows: July–September, 1918, 3,225; month of October, 1918, 5,237. This mortality was distributed according to provinces as follows:

Province.	Influenza.		Other acute respiratory diseases.		Population Dec. 31, 1917.
	July–Sept., 1918.	Oct., 1918.	July–Sept., 1918.	Oct., 1918.	
North Brabant	89	166	427	390	714,978
Gelderland	91	411	376	771	723,437
South Holland	217	421	693	687	1,636,097
North Holland	147	825	598	1,207	1,270,808
Zealand	13	94	60	140	245,933
Utrecht	39	121	153	241	327,192
Friesland	18	59	76	112	384,363
Overyssel	83	546	291	834	431,757
Groningen	23	154	128	300	358,663
Drenthe	28	100	98	144	209,951
Limburg	67	120	330	231	430,489
Total	815	3,017	3,225	5,737	6,724,663

NORWAY.

Influenza—Trondhjem.

During the month of January, 1919, 1,062 cases of influenza were reported at Trondhjem, Norway.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Mar. 21, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Jan. 12–18	308	270	
Calcutta	do		170	
Madras	Dec. 22–28	73	52	Oct. 27–Nov. 2, 1918: Cases, 9; deaths, 4.
Rangoon	Jan. 5–18	8	7	
Indo-China				July 1–31, 1918: Cases, 456; deaths, 347.
Anam	July 1–31	32	26	
Cambodia	do	124	98	
Cochin-China	do	247	190	
Saigon	Dec. 30–Jan. 5	94	47	
Kwang-Chow-Wan	July 1–31	50	34	
Tonkin	do	3		
Philippine Islands:				
Manila	Jan. 26–Feb. 1	6	3	
Provinces				Jan. 26–Feb. 1, 1919: Cases, 129; deaths, 96.
Batangas	Jan. 26–Feb. 1	1		
Bohol	do	5	3	
Bulacan	do	3	3	
Ilocos Sur	do	5	2	
Iloilo	do	20	15	
Laguna	do	4	5	
Oriental Negros	do	16	11	
Pampanga	do	1	1	
Pangasinan	do	29	17	
Tayabas	do	45	39	

PLAGUE.

China:				
Hongkong	Jan. 12–Feb. 1	5	5	
Ecuador:				
Guayaquil	Feb. 1–15	13	4	
India:				
Bombay	Jan. 12–18	1	1	
Calcutta	do		1	
Karachi	Jan. 19–25	2	2	
Madras	Dec. 22–28	3	4	
Madras Presidency	do	221	138	Oct. 27–Nov. 2, 1918: Cases, 142; deaths, 138.
Rangoon	Jan. 5–18	17	15	
Indo-China				July 1–31, 1918: Cases, 98; deaths, 71.
Anam	July 1–31	22	22	
Cambodia	do	30	26	
Cochin-China	do	43	22	
Kwang-Chow-Wan	do	1	1	

SMALLPOX.

Brazil:				
Rio de Janeiro	Dec. 30–Jan. 5	1		
Canada:				
Nova Scotia—				
Halifax	Feb. 23–Mar. 1	10		
Ontario—				
Ottawa	Mar. 2–8	6		
Prince Edward Island—				
Charlotte Town	Feb. 27–Mar. 5	1		
Quebec—				
Paspebiac	Feb. 23–Mar. 1	6		
China:				
Amoy	Jan. 12–25			Present.
Chungking	Jan. 5–18			Do.
Foochow	Jan. 5–Feb. 1			Do.
Hongkong	Jan. 12–Feb. 1	3	2	
Nanking	Jan. 26–Feb. 1			Do.
Shanghai	Jan. 20–26	1		
Chosen:				
Chemulpo	Jan. 1–31	6	1	
France:				
Bordeaux	Feb. 8–13		1	
Great Britain:				
Liverpool	Jan. 26–Feb. 8	2		1 case removed from vessel.

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Mar. 21, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Jan. 12-18	12	3	
Calcutta	do		6	
Karachi	Jan. 19-25	9	5	
Madras	Dec. 22-28	10	6	Oct. 27-Nov. 2, 1918: Cases, 5; deaths, 4.
Rangoon	Jan. 5-18	52	11	
Indo-China				July 1-31, 1918: Cases, 302; deaths, 104.
Anam	July 1-31	58	43	
Cochin-China	do	238	60	
Saigon	Dec. 30-Jan. 5	1	1	
Tonkin	July 1-31	6	1	
Italy:				
Genoa	Jan. 16-31	1	1	
Palermo	Jan. 31-Feb. 6	1		
Japan:				
Kobe	Jan. 19-Feb. 8	275	77	
Taihoku	Jan. 15-21	22	1	Island of Formosa.
Yokohama	Jan. 20-26	1		
Mesopotamia:				
Bagdad	Dec. 21-27	10	9	
Do	Dec. 28-Jan. 10	6	6	
Newfoundland:				
St. Johns	Feb. 22-28	5		
Outports—				
St. Georges	do	4		
Philippine Islands:				
Manila	Jan. 26-Feb. 1	4	1	Varioloid, 7.
Spain:				
Barcelona	Jan. 19-25		2	

TYPHUS FEVER.

Bulgaria:				
Æteven	Mar. 10			Present.
Rustchuk	do			Do.
Chosen (Korea):				
Seoul	Jan. 1-31	2		
Egypt:				
Alexandria	Jan. 29-Feb. 1	10	4	
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Jan. 5-18		17	
Macedonia:				
Drama	Mar. 17			Present.
Kavala	do	300		Estimated.
Mesopotamia:				
Bagdad	Dec. 21-27	1		
Do	Dec. 23-Jan. 10	3		
Mexico:				
Aguascalientes	Feb. 17-23		1	
Netherlands:				
Amsterdam	Dec. 8-14	1		
Do	Jan. 12-18	4		
Siberia:				
Vladivostok	Dec. 17-30	20		
Do	Dec. 31-Jan. 15	31	3	

YELLOW FEVER.

Ecuador:				
Catarama	Feb. 1-15	1		
Duran	do	1	1	
Guayaquil	do	27	13	
Milagro	do	1		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Mar. 14, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17-30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13-19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18-Dec. 28	1,351	1,031	
Do	Dec. 29-Jan. 11	1,396	1,167	
Calcutta	Sept. 20-Dec. 21		241	Report for Nov. 23, 1918, mi[illegible]
Do	Dec. 29-Jan. 4		27	
Madras	Oct. 5-Dec. 21	191	112	
Do	Jan. 5-18	288	197	
Rangoon	Oct. 5-Dec. 21	35	33	
Do	Dec. 29 Jan. 4	5	3	
Indo-China:				
Anam	Aug. 1-31	5	5	
Cambodia	do	98	71	
Cochin-China	do	110	89	
Saigon	Oct. 7-Dec. 22	75	45	
Tonkin	Aug. 1-31	1		
Java:				
East Java				Oct. 7-21, 1918: Cases, [illegible] deaths, 94.
Surabaya (district)	Oct. 7-Nov. 18	636	391	
Mid-Java				Sept. 25-Dec. 18, 1918: Cases, 3,282; deaths, 2,614
Samarang	Sept. 26-Oct. 16	120	111	
West Java				Oct. 3-Dec. 11, 1918: Cases, 42[illegible] deaths, 238. Dec. 27, 1918-Jan. 2, 1919: Cases, 2; deaths, 2
Batavia	Oct. 3-Dec. 11	201	148	
Do	Dec. 27-Jan. 2	2	2	
Mesopotamia:				
Bagdad	Oct. 11-18	8		
Philippine Islands:				
Manila	Sept. 22-Dec. 28	181	121	
Do	Dec. 29-Jan. 18	10	4	
Provinces				Nov. 2-9, 1918: Cases, 511, deaths 417. Nov. 17-Dec. 28, 1918: Cases, 1,273; deaths, 958. Dec. 29, 1918-Jan. 25, 1919: Cases, 410; deaths, 302.
Albay	Dec. 15-21	1	1	
Bataan	Nov. 17-Dec. 28	38	32	
Do	Jan. 5-11	2	2	
Batangas	Nov. 2-9	156	141	
Do	Nov. 17-Dec. 28	79	65	
Do	Dec. 29-Jan. 25	19	15	
Bohol	Nov. 2-9	19	17	
Do	Nov. 17-Dec. 21	12	5	
Do	Jan. 12-25	17	12	
Bulacan	Oct. 27-Nov. 2	5	6	
Do	Nov. 17-Dec. 28	44	30	
Do	Dec. 29-Jan. 25	25	14	
Capiz	Dec. 22-28	7	5	
Do	Jan. 5-25	28	14	
Cavite	Oct. 27-Nov. 2	38	28	
Do	Nov. 17-Dec. 21	163	75	
Do	Dec. 29-Jan. 25	17	16	
Cebu	Dec. 15-21	41	20	
Do	Jan. 12-18	13	12	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29 Jan. 25	32	20	
Iloilo	Oct. 27-Nov. 2	9	6	
Do	Nov. 17 Dec. 21	70	51	
Do	Jan. 5-25	29	20	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Jan. 25	42	33	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 24-30	4	5	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-18	23	17	
Nueva Ecija	Jan. 12-25	9	6	
Oriental Negros	Nov. 2-9	20	8	
Do	Nov. 17-Dec. 7	6	6	
Do	Jan. 5-25	6	5	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-25	14	11	
Pangasinan	Nov. 2-9	236	192	
Do	Nov. 17-Dec. 28	428	313	
Do	Dec. 29 Jan. 25	90	74	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Mar. 14, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Contd.				
Provinces—Continued.				
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-25	8	4	
Tayabas	Nov. 2-9	7	4	
Do	Nov. 17-Dec. 28	54	25	
Do	Dec. 29-Jan. 25	9	8	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-18	19	15	
Poland:				
Warsaw	Sept. 29-Oct. 5	2	.....	
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 5-Aug. 21, 1918: Cases, 884; deaths, 783.
Ukrania—				
Ekaterinaslav	Sept. 1-20	7	6	
Odessa	.....do	25	.....	Sept. 1-20, 1918: 11 cases on s. s. Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
China:				
Amoy	Nov. 24-Dec. 8	.....	.....	Present.
Chungking	Dec. 1-7	.....	.....	Do.
Hongkong	Oct. 26-Dec. 8	1	1	
Do	Nov. 9-Dec. 28	1	2	
Ecuador:				
Guayaquil	Nov. 1-Dec. 31	15	3	
Do	Jan. 1-31	23	8	
Tsuru	Dec. 16-31	1	1	
Egypt	.....	.....	.....	Jan. 1-Nov. 21, 1918: Cases, 357; deaths, 153.
India	.....	.....	.....	Sept. 23-Dec. 28, 1918: Cases, 24,279; deaths, 18,369. Dec. 29, 1918-Jan. 11, 1919: Cases, 3,361; deaths, 2,470.
Bombay	Aug. 18-Dec. 28	41	29	
Calcutta	Dec. 22-28	.....	1	
Karachi	Oct. 19-Dec. 28	17	17	
Do	Dec. 29-Jan. 18	3	3	
Madras	Dec. 8-21	23	13	
Do	Dec. 29-Jan. 18	127	56	
Madras Presidency	Oct. 13-Dec. 21	930	636	
Do	Dec. 29-Jan. 18	1,145	728	
Rangoon	Oct. 5-Dec. 21	84	81	
Do	Dec. 29-Jan. 4	4	4	
Indo-China:				
Anam	Aug. 1-31	15	10	
Cambodia	.....do	.....	23	
Cochin-China	.....do	14	11	
Saigon	Oct. 7-Nov. 24	5	1	
Java:				
East Java	.....	.....	.....	Oct. 7-Nov. 18, 1918: Cases, 78; deaths, 78.
Surabaya (district)	Oct. 7-Nov. 18	61	61	
Mid-Java	.....	.....	.....	Sept. 25-Oct. 16, 1918: Cases, 14; deaths, 14.
Samarang	Sept. 25-Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16-29	5	2	
Siam:				
Bankok	Sept. 21-28	4	3	
Do	Oct. 5-12	2	2	
Venezuela:				
Caracas	Dec. 30	1	.....	
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Mar. 14, 1919—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
British East Africa:				
Mombasa	Sept. 1-Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-18	2		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 22	6		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 10			Do.
Digby	do			Do.
Halifax	Dec. 7-28	10		
Do	Jan. 5-Feb. 22	100		
Middleton	Dec. 29-Jan. 4			Do.
Sydney	Jan. 5-Feb. 15	3		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-Feb. 8	6		
Toronto	Feb. 2-15	2		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-Mar. 1	13		
Paspebiac	Jan. 12-Feb. 22	2		
Quebec	Dec. 15-21	1		
Do	Dec. 29-Feb. 15	13		
Ceylon:				
Colombo	Jan. 12-18	1		
China:				
Amoy	Oct. 13-Dec. 28			Present.
Do	Jan. 5-11			Do.
Canton	Nov. 17-23			Do.
Chungking	Nov. 10-Dec. 28			Do.
Foochow	Nov. 24-Dec. 28			Do.
Hongkong	Dec. 15-21	1	1	
Nanking	Dec. 1-28			Do.
Do	Dec. 29-Jan. 25			Do.
Chosen (Korea):				
Chemulpo	Nov. 1-Dec. 31	15	4	
Denmark:				
Copenhagen	Nov. 9-Dec. 28	12		
Do	Dec. 29-Jan. 19	15		
Egypt:				
Alexandria	Dec. 17-23	1	1	
Do	Jan. 22-28	1		
India:				
Bombay	Aug. 18-Dec. 28	35	8	
Do	Dec. 29-Jan. 11	18	5	
Calcutta	Sept. 29-Dec. 28		17	Report for week ended Nov. 2, 1918, missing.
Do	Dec. 29-Jan. 4	6		
Karachi	Sept. 29-Dec. 28	13	4	
Do	Dec. 29-Jan. 18	17	2	
Madras	Oct. 5-Dec. 21	52	34	
Do	Dec. 29-Jan. 18	47	15	
Rangoon	Oct. 20-Dec. 21	32	6	
Do	Dec. 29-Jan. 4	16	7	
Indo-China:				
Annam	Aug. 1-31	29	8	
Cambodia	do	78	40	
Cochinchina	do	97	27	
Saigon	Oct. 7-Dec. 22	20	5	
Tonkin	Aug. 1-31	5		
Italy:				
Genoa	Jan. 9-15	1		
Japan:				
Kobe	Oct. 26-Dec. 28	186	46	
Do	Dec. 29-Jan. 18	145	25	
Java:				
East Java				Oct. 7-Nov. 27, 1918: Cases, 31.
Surabaya (district)	Oct. 7-Nov. 18	15		
Mid Java				Sept. 25-Dec. 14, 1918: Cases, 172, deaths, 3.
West Java				Oct. 2-Dec. 11, 1918: Cases, [illegible], deaths, 263. Dec. 27, 1918-Jan. 2, 1919: Cases, 39; deaths, 17.
Batavia	Oct. 2-Dec. 11	185	151	
Do	Dec. 27-Jan. 2	13	8	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Mar. 14, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Manchuria:				
Dairen	Jan. 15–21	1		
Mesopotamia:				
Bagdad	Oct. 11–Dec. 20	298	88	
Mexico:				
Ciudad Juarez	Nov. 24–30	1		
Mexico City	Sept. 22–Dec. 28	23		
Do	Dec. 29–Jan. 25	8		
Vera Cruz	Feb. 10–16	2		
Newfoundland:				
St. Johns	Dec. 6–20	4		
Do	Dec. 28–Feb. 21	7		
Outports—				
Avondale	....do	4		
Blaine Harbor	Dec. 14–20	2		
Bay of Islands	Jan. 11–17	6		
Do	Feb. 15–21	10		
Bay Roberts	Dec. 21–27	1		
Bonavista	Jan. 26–31	1		
Bryants Cove	Dec. 7–13	3		
Burin	....do	4		
Coleys Point	Dec. 14–20	1		
Curling	Jan. 26–31	3		
Frenchmans Cove	Feb. 1–7	1		
Kings Cove	Jan. 18–24	1		
Little Paradise	Feb. 9–14	1		
Melvers	Feb. 1–7	15		
Merasheen	....do			Present.
Mercers Cove	Feb. 9–14	1		
Middle Arm	Feb. 1–7	40		Bay of Islands.
Musgrave Harbor	Dec. 7–13	4		
Do	Jan. 11–17	6		Feb. 7, 1919: Present.
Paradise	Dec. 7–13	60		Placentia Bay.
Petitforte	Feb. 15–21	1		
Saddle Hill	....do	1		Harbor Grace.
Springdale	....do	1		
St. Georges	Feb. 1–7	11		
St. Jacques	Jan. 18–24	2		
Panama				Aug. 1–31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1–25, 1919: Cases, 28.
Colon	Dec. 15–21	1		
Do	Dec. 29–Feb. 9	8		
Philippine Islands:				
Manila	Nov. 2–9	4	3	
Do	Dec. 29–Jan. 25	2	1	Varioloid, 2.
Portugal:				
Lisbon	Nov. 16–Dec. 28	843		
Portuguese East Africa:				
Lourenco Marques				July 1–Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1–3	4		
Spain:				
Barcelona	Jan. 9–15		2	
Cadiz	Oct. 1–Dec. 31	18		
Madrid	Sept. 1–Oct. 31	153		
Seville	Nov. 1–30	2		
Valencia	Nov. 10–Dec. 21	40	9	
Do	Dec. 29–Jan. 11	33	4	
Straits Settlements:				
Penang	Oct. 6–12	1		
Union of South Africa:				
Cape Town	Aug. 1–30	1		
Johannesburg	Aug. 1–Oct. 31	12		Nov. 1–30, 1918: Cases, 4.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1–30	1		
Austria-Hungary:				
Hungary	Sept. 2–8	2		
Brazil:				
Ceara	Sept. 14–21	1		
China:				
Antung	Dec. 2–15	2		
Do	Jan. 6–12		1	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Mar. 14, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Colombia:				
Barranquilla	Nov. 8-Dec. 28		3	
Do	Jan. 5-25	2	2	
Egypt:				
Alexandria	Oct. 14-Dec. 31	83	36	
Do	Jan. 1-21	18	10	
Germany:				
Breslau	Sept. 29-Oct. 19	12	8	
Königsberg	do	3	1	
Mostolten	do	7	2	District of Allenstein.
Great Britain:				
Glasgow	Dec. 22-28	5		
Do	Jan. 5-Feb. 8	9	1	
Greece:				
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-Jan. 18		42	
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-Feb. 2	11	3	
Java:				
East Java				Oct. 7-21, 1918: Cases, 5.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 23-Oct. 16, 1918: Cases, 8.
West Java				Oct. 2-23: Cases, 31; deaths, 6.
Batavia	Oct. 2-23	15	4	
Mesopotamia:				
Bagdad	Oct. 5-11	1		
Mexico:				
Aguascalientes	Feb. 2-16		2	
Guadalajara	Nov. 1-30	2		
Mexico City	Sept. 22-Dec. 28	434		
Do	Dec. 29-Jan. 25	128		
Netherlands:				
Rotterdam				Jan. 30-Feb. 27, 1919: Cases, 402; deaths, 46.
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 15	23		
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Pernambuco	Oct. 1-Nov. 30	2	1	
Ecuador:				
Balahoyo	Nov. 1-30	1		
Chobo	Jan. 1-15	1		
Taule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-31	2		
Guayaquil	Nov. 1-Dec. 31	163	87	
Do	Jan. 1-31	77	41	
Milagro	Nov. 1-15	1		
Naranjal	do	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Pavo (Hacienda)	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel.				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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PUBLIC HEALTH REPORTS

VOL. 34 MARCH 28, 1919 NO. 13

IS YOUR WATER SUPPLY SAFE?

Experience has shown that a large proportion of the public water supplies in this country are so inadequately safeguarded that they constitute, at least potentially, serious sources of water-borne disease. No wonder, therefore, that in many communities the prevalence of typhoid fever is so high as to be a disgrace. The attention of our readers is invited to the interesting and instructive article describing an outbreak of typhoid fever in Herkimer, N. Y. This shows the spectacular, epidemic type of outbreak associated with a high degree of pollution. Health officers and local government officials should remember, however, that constant high typhoid prevalence, even though not in the form of an epidemic outbreak, is very often traceable to a polluted public water supply.

If you are in doubt as to your own community's supply, why not consult the State health officer? As may be seen from the list printed on pages 622 and 623, the Public Health Service has published a number of instructive bulletins dealing with typhoid fever and water supplies. Copies of these may be had on request to the Surgeon General, United States Public Health Service, Washington, D. C.

WATER-BORNE TYPHOID FEVER OUTBREAK IN HERKIMER, N. Y.[1]

By THEODORE HORTON, Chief Engineer, New York State Department of Health.

The following report of a water-borne outbreak of typhoid fever in Herkimer, N. Y. is particularly instructive because it illustrates the disastrous results which may follow the temporary failure, because of lack of expert supervision, to chlorinate a seriously contaminated water supply. It may also be of interest as showing the measures adopted by the State department of health in controlling the outbreak.

Briefly reviewed, the history of the outbreak is as follows: Between September 1, 1918, and January 1, 1919, some 155 cases of typhoid

[1] In the compilation of this material the author desires to acknowledge his indebtedness to Mr. E. S. Chase, Assistant Engineer, Dr. J. E. Clark, and Dr. R. W. E. Cole, Sanitary Supervisors; F. W. Jones and Earl Devendorf, Assistant Engineers; Dr. A. L. Fagin, Health Officer, Eva M. Schied, County Nurse; Mary B. Holmeister, Village Nurse; and William Owens, Milk Inspector.

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fever were reported from Herkimer. Upon the discovery of an undue prevalence of typhoid in the village, an epidemiological investigation was started in October, 1918, by the Division of Communicable Diseases, and an investigation of the water supply was made by the Engineering Division. The information secured by these two investigations pointed conclusively to an infection of the public water supply as the primary source of the outbreak.

It appears that on August 28, 1918, it was considered necessary by the municipal authorities to augment the regular well supply of the village by pumping directly from the hydraulic canal by means of the fire pump at the Herkimer Fiber Co. While an attempt was made to sterilize this emergency supply by means of liquid chlorine, the arrangement of the apparatus was such that the chlorine was not properly applied. Again on September 5, 6, and 7 unchlorinated canal water was pumped into the distribution system, and, furthermore, the regular well supply was unchlorinated on September 1, 2, 5, 6, and 7. The use of the canal was discontinued on September 29, and about this time the suction of one of the pumps at the village pumping station was rearranged so as to permit direct pumping from West Canada Creek with chlorination. Subsequent to the 7th of September the entire supply of the village was treated more or less continuously with chlorine, although from the records of operation there would appear to be some doubt as to the adequacy of the treatment until about November 25 when supervision of the chlorination was assumed by the Engineering Division.

On September 23, October 8, and October 22 the water supply was visited by engineers from this department. Each time the chlorination apparatus was found to be properly operating and the samples collected at these times were free from active contamination. Records, however, of operation of the chlorination apparatus and the results of analyses made for the village by Prof. Hodges, of Utica, indicate that there were times when adequate sterilization of the supply was not being obtained even after the visits of our engineers and after the admonitions of the department with respect to the extreme importance of proper sterilization. It was accordingly considered advisable, particularly in view of the continuation of reported cases of typhoid subsequent to our report of October 25, for this division to maintain temporary supervision of the chlorination of the water supply. This supervision was begun on November 25, and from that date until December 20 an engineer from the department was detailed to remain in Herkimer in constant touch with the situation. During this period the pumping station was visited several times daily and even during the night. Frequent chemical tests were made to determine the presence of excess chlorine in the treated water, it being planned to apply sufficient amounts of

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chlorine to permit the existence of a marked excess in the treated water at the end of 5 minutes. The chlorine was applied to the water from the infiltration gallery at a rate of about 0.5 parts per million and to the creek water at a rate of about 1.5. These rates were varied somewhat from time to time as was found necessary. Samples for laboratory examination were collected about twice each week, and the results of the analyses of these samples, made by the Division of Laboratories and Research, will be found appended in Table 3.

In addition to the supervision of the chlorination, numerous conferences were held with and communications sent to the municipal authorities urging the necessity of the greatest care and efficiency in the operation of the chlorination apparatus. Upon our urgent recommendation two men were appointed by the village to observe and record the operation of the chlorine apparatus. These men were appointed and went on duty on December 15 and were carefully instructed by our engineer as to the proper operation of the chlorine apparatus. Tests for excess chlorine are made at two-hour intervals by these men, and strict orders have been issued to stop pumping should any trouble develop with the operation of the chlorination apparatus. Records of operation are kept on specially prepared forms and are checked over by our engineers who now visit Herkimer at weekly intervals. In view of the fact that practically no cases of typhoid have been reported recently, it appears very probable that the outbreak has been definitely checked and that little danger of its recurrence is to be expected, provided the chlorination of the supply is carried on as efficiently as it has been since November 25, 1918.

Two sets of six wells each have been drilled several hundred feet southwest of the pumping station, and it is expected that as soon as these wells are connected with the distribution system it will be no longer necessary to pump directly from West Canada Creek. Chlorination apparatus are to be provided for these sets of wells and the water will be chlorinated. The location of these wells on the outskirts of a thickly settled community is not satisfactory for a permanent source of supply, due to the numerous opportunities for pollution of the underground waters in this vicinity. Accordingly the use of these wells should be continued only until a new permanent supply is obtained. Studies are now under way for this purpose and should be completed at the earliest possible time.

In addition to the water from the public supply, numerous local wells scattered throughout the village have been used by the public. Many of these wells have very insanitary conditions in their vicinity. Inspections were made of, and samples collected from, several of these wells. The analyses show that the waters from practically all of these wells are derived from seriously-polluted ground-water

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the chart of onsets (Fig. 1) it will be seen that the larger of onsets occurred between the middle of September and dle of October, approximately three to four weeks subse- the pumping of unchlorinated canal water into the distri- ystem. If the average period of incubation in water-borne s of typhoid fever is taken as from one to two weeks, it ppear probable that there had first been a slight infection of r supply, followed after a few days by a more massive one. e group of cases with onsets on September 20 would place tion in the week beginning September 1. Another group of l onsets between the first and middle of November, and while proportion of these cases may have been due to contact es occurring in the first group, it appeared from records of n of chlorination plants and results of analyses that insuffi- plication of chlorine occurred at times up to November 25, e operation of the chlorine apparatus was taken over by the of Engineering. Since this time, however, only a few scat- ses have occurred, and the majority of these are probably of y origin.

the great majority of cases gave evidence of having used village water for drinking purposes, and while the evidence pect to the use of raw canal water indicated clearly the vil-

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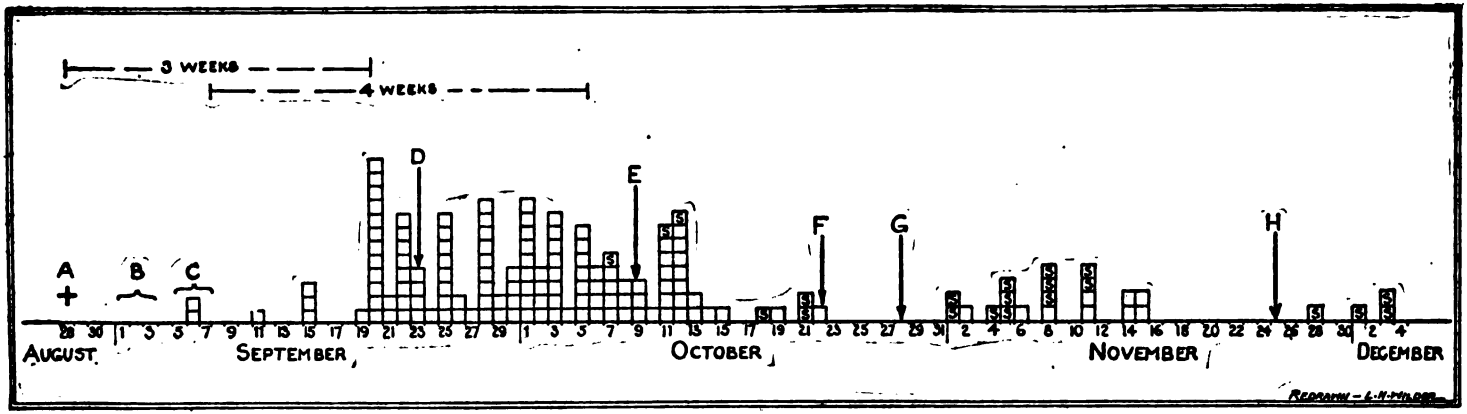

FIG. 1.—Number of cases, by dates of onset, of typhoid fever at Herkimer, N. Y., 1918.

NOTE.—Each square represents 1 case. S represents a secondary or possible contact case; A, unchlorinated canal water pumped; B, unchlorinated well water pumped; C, unchlorinated canal and well water pumped; D, use of canal water first brought to the attention of the State department of health; E, F, inspection of water supply made by the Division of Sanitary Engineering; G, second chlorination apparatus installed at pumping station; H, supervision of chlorination begun by the Division of Sanitary Engineering.

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delivered by the various dealers, no preponderance ... upon the route of any one dealer. It was considered advisable, however, in order to minimize the danger of the spread of the disease through milk bottles, to require that no milk bottles be delivered to houses in which typhoid occurred. This requirement was put into effect about the 1st of December and the milk inspector was instructed to follow up the matter.

With respect to age distribution the following summary has been made:

TABLE 2.

Age.	Cases.	Percentage.
0 to 10	46	30
10 to 20	44	29
20 to 30	28	18
30 to 40	15	10
40 to 50	13	8
50 to 70	7	5
Total of known ages	153	100
Unknown	2	.....

Although the number of cases amongst children up to 10 years of age is somewhat larger than is usually found in water-borne typhoid fever outbreaks, it should be noted that of the 46 cases within this age group some 14 are probably secondary in origin as they occurred in households having earlier cases of typhoid.

The high mortality, some 28 deaths among 155 reported cases, indicates incomplete reporting of mild cases. It should be noted, however, that this outbreak of typhoid occurred during the influenza epidemic of last fall and, accordingly, errors in diagnosis may

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have been made. Furthermore, complications with influenza may have increased the fatality of the typhoid in some cases.

In order to prevent so far as possible the occurrence of additional cases, of either secondary or primary origin, a general letter of instruction and warning to the residents of the village was given to the press and also distributed throughout the village on handbills about the 1st of December. This letter contained specific directions and precautions to be followed by everyone in the village with reference to boiling water and milk, isolation of cases of typhoid fever, use of disinfectants and other essential matters. An emergency hospital established by the village was used to care for a number of cases and the village nurse, Miss Hofmeister, gave individual assistance and instructions at the homes of the majority of cases.

SUMMARY.

From the evidence presented in this report with its appended tables, it may be concluded—

(1) That the outbreak of typhoid fever in Herkimer was brought about by the pumping of unchlorinated and infected creek water into the village mains.

(2) That, at the time of this present report, it appears probable that the outbreak has been definitely checked.

(3) That, although the operation of the chlorination apparatus has apparently been efficient since the latter part of November, the character of the creek water is such that chlorination alone can not be considered as a sufficiently practical and reliable safeguard under all conditions.

(4) That, in view of the difficulty of adequately chlorinating a water of this character, the supervision of the chlorination of the water supply by men specifically detailed for this purpose is absolutely necessary.

(5) That the majority of local wells in the village are derived from polluted ground water sources and are a potential menace to health.

(6) That, although the new wells for the public supply will probably yield a supply more easily chlorinated than the creek supply, they are somewhat unsatisfactorily located with respect to possible sources of pollution of the ground water tributary to them.

(7) That the village urgently needs the development of a new source of water supply, of adequate quantity and of satisfactory quality.

It is therefore, recommended—

(1) That the temporary auxiliary water supply from the driven wells be secured as soon as possible.

(2) That the present use of creek water be abandoned as soon as the new well supply will permit.

(3) That all water admitted to the distribution system of the village, either from the wells or from any other source, be adequately and properly chlorinated.

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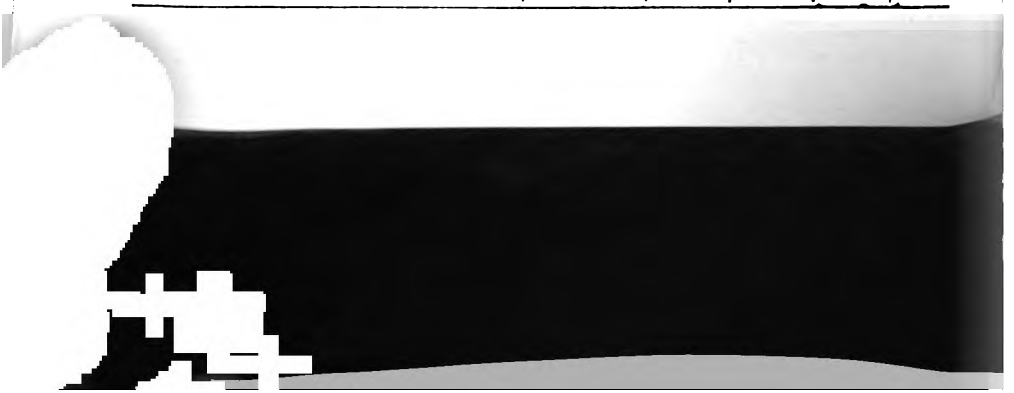
Raw creek water	Oct. 9, 1918	4,100	3+, 0—	3+, 0—	3+,
Chlorinated creek water	do	325	3+, 0—	3+, 0—	0+, 3—
Chlorinated mixed supply	do	70	0+, 3—	0+, 3—	0+, 3—
Public fountain, chlorinated	do	30	2+, 1—	0+, 3—	0+, 3—
Raw creek water	Oct. 22, 1918	5,900	3+, 0—	3+, 0—	3+, 0—
Chlorinated creek water	do	16	3+, 0—	0+, 3—	0+, 3—
Raw well water	do	20	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	71	0+, 3—	0+, 3—	0+, 3—
Tap, Palmer House, chlorinated	do	18	1+, 2—	0+, 3—	0+, 3—
Raw creek water	Nov. 26, 1918	750	3+, 0—	3+, 0—	2+, 1—
Chlorinated creek water	do	10	0+, 3—	0+, 3—	0+, 3—
Raw well water	do	75,000	2+, 0—	0+, 3—	0+, 3—
Chlorinated well water	do	20	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed	do	15	0+, 3—	0+, 3—	0+, 3—
Raw creek water	Dec. 3, 1918	300	3+, 0—	3+, 0—	2+, 1—
Chlorinated creek water	Dec. 2, 1918	2	0+, 3—	0+, 3—	0+, 3—
Raw well water	do	300	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	0	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed	do	1	0+, 3—	0+, 3—	0+, 3—
Tap, Main Street, chlorinated, mixed, a. m	Dec. 3, 1918	5	0+, 3—	0+, 3—	0+, 3—
Tap, Mohawk Street, chlorinated, mixed	do	450	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated mixed, p. m	do	4	0+, 3—	0+, 3—	0+, 3—
Raw creek water	Dec. 5, 1918	325	3+, 0—	3+, 0—	1+, 2—
Chlorinated creek water	do	3	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	30	0+, 3—	0+, 3—	0+, 3—
Tap, Palmer House, chlorinated mixed	do	2	0+, 3—	0+, 3—	0+, 3—
Chlorinated creek water	Dec. 6, 1918	16	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	2	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed	do	200	0+, 3—	0+, 3—	0+, 3—
Raw creek water	Dec. 10, 1918	1,300	3+, 0—	3+, 0—	2+, 0—
Chlorinated creek	do	8	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	550	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed	do	30	0+, 3—	0+, 3—	0+, 3—
Raw creek water	Dec. 12, 1918	450	3+, 0—	3+, 0—	0+, 3—
Chlorinated creek water	do	5	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	30	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed	do	12	0+, 3—	0+, 3—	0+, 3—
Chlorinated creek water	Dec. 16, 1918	5	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	1	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed, 3.30 p. m	do	2	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed, 4.30 p. m	do	5	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed, 2 p. m	Dec. 19, 1918	2	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed, 10 a. m	Dec. 20, 1918	3	0+, 3—	0+, 3—	0+, 3—
Raw creek water	Dec. 24, 1918	2,000	3+, 0—	3+, 0—	2+, 1—
Chlorinated creek water	do	19	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	2	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed	do	11	0+, 3—	0+, 3—	0+, 3—
Do	do	6	0+, 3—	0+, 3—	0+, 3—
Raw creek water	Dec. 27, 1918	480	3+, 0—	3+, 0—	0+, 3—
Chlorinated creek water	do	7	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	5	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed	do	3	0+, 3—	0+, 3—	0+, 3—
Raw creek water	Dec. 30, 1918	200	3+, 0—	3+, 0—	1+, 2—
Chlorinated creek water	do	1	0+, 3—	0+, 3—	0+, 3—
Chlorinated well water	do	2	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed, 10.10 a. m	do	2	0+, 3—	0+, 3—	0+, 3—
Tap, chlorinated, mixed, 3 p. m	do	2	0+, 3—	0+, 3—	0+, 3—



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serving with the American Expeditionary Forces brought to the attention through the medium of the weekly bulletin of diseases. It would appear, however, that many officers have utterly failed to grasp the significance of these reports and warnings, a fact which may be due to a false sense of security under the popular belief that vaccination against typhoid and paratyphoid gives a complete immunity even in the midst of gross insanitary conditions.

Notwithstanding the fact that typhoid and paratyphoid fevers are endemic in the United States, and in spite of our extensive experience with these diseases during the Spanish-American War and later during the period of mobilization on the Mexican border, it is evident that many medical officers have gained but little knowledge of the fundamental principles underlying prevention and control. It is also quite evident that some medical officers are grossly careless and neglectful of their duties and responsibilities as medical officers and sanitarians.

This office realizes fully that the United States has raised within a short period of time an army of several millions of men who have been poorly instructed in personal hygiene and sanitation; it realizes that 2,000,000 of these men have been brought to France, where they have encountered environmental conditions differing entirely from those existing in the United States; it is fully recognized that military necessity has at times rendered sanitary control extremely difficult, especially during the stress of active combat.

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To our regret, be it said, the high standards of sanitation and personal hygiene set by the Medical Department during the past 10 to 15 years have not been lived up to during the past one and one-half years. This has been due to a combination of factors, the more important of which have been the lack of facilities and materials, transportation difficulties, and insufficient training and personnel. However, many medical officers serving with combatant and S. O. S. units have been able to overcome all handicaps, and have by wise counsel and by eternal vigilance succeeded in keeping their units in excellent fighting trim.

The actual physical fighting is now at an end, and the time-worn excuse that "there is a war on" will no longer be tolerated. But the fight against disease still continues.

The greater part of the American Expeditionary Forces is now relatively stationary in training areas or with the armies of occupation, where definite sanitary measures can be instituted and enforced, where instruction of the line troops can be carried out, and where opportunity is presented to initiate rules of personal hygiene. Medical officers will therefore be held responsible for the proper supervision of the health of troops.

Carbon copies of all general recommendations of medical officers covering sanitation and personal hygiene, promulgated officially as orders and memoranda by superior authority, will be mailed to this office.

II.—Summary of Typhoid-Paratyphoid Incidence in the American Expeditionary Forces.

In order that all medical officers in the American Expeditionary Forces may have a somewhat comprehensive view of the occurrence of these fevers in the American Expeditionary Forces, the following brief review is presented:

(*a*) From June 1, 1917, to June 1, 1918, but few cases occurred. The rate was well within the limits to be expected in view of the sanitary conditions under which the troops were of necessity living. The cases were sporadic and only occasionally did secondary cases develop.

(*b*) In July, 1918, a replacement unit consisting of 248 men from Camp Cody, N. Mex., reached England with typhoid prevailing extensively; 98 men, or 39.5 per cent, had typhoid, and the case death rate was 8.42 per cent.

It was evident from the investigation that the men were exposed to infection through contaminated drinking water while en route to the port of embarkation in the United States. The unit had been vaccinated a few months prior to the occurrence of the epidemic. Most of the patients presented the typical clinical features of typhoid.

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Division, in which 5 cases occurred between October 1, 1918, and February 1, 1919, and the —— Division, in which 115 cases occurred in the same period.

More than 300 cases of typhoid-paratyphoid may be attributed to the Argonne offensive. Eight hundred and seventy-four typhoids and paratyphoids have been reported in the American Expeditionary Forces since October 1, 1918. The percentage of confirmatory laboratory diagnoses has been low on account of the fact that the clinicians frequently failed to suspect the disease in its early stages.

(*g*) A small but severe epidemic occurred in the Joinville concentration area in December and January. In a group of Medical Department units (evacuation and mobile hospitals and sanitary trains) concentrated there 75 cases occurred, with a case death rate of approximately 20 per cent. The cases were suspected in the early stages of the disease and the percentage of positive findings by culture of urine or feces has been greater than 75 per cent. The cause of this epidemic has not been completely analyzed as yet, but there is but little question that it was due to the use of infected drinking water.

III.—Reports of Cases.

If epidemics are to be recognized in their incipiency and measures initiated to control and prevent further extension, it is manifestly of the utmost importance that reports of suspects and proven cases be transmitted to the medical officers of organizations directly concerned at the very earliest possible moment. The large number of troops involved, methods of evacuation, delays in transmission of reports, necessary censorship regulations, frequency of troop movements, laxity in making reports, unwarranted delay in making diagnoses, and other factors have tended to hamper this most important instrument for the control of transmissible diseases. The medical officers charged with the supervision of the health of all organizations must know at the earliest possible moment of the diagnosis or provisional diagnosis of typhoid or paratyphoid in a member of his organization, and for this diagnosis he must depend on the ward surgeon in the camp, evacuation, mobile, base, or other hospital unit to which the patient has been evacuated. Ward surgeons and chiefs of medical service in hospitals charged with the care of these patients do not appear to comprehend their responsibility in this matter. As a matter of fact, they are jointly responsible with the medical officer of the organization for any epidemics occurring in a command if they delay, in the least, in making diagnoses or in reporting suspects or positive cases. The records of this office show that patients with typhoid have passed successively through camp, field, evacuation, and base hospitals without any documentary evidence that typhoid or paratyphoid was even suspected. There are records of a stay of

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their medical services directly responsible for the prompt submission of diagnoses in these cases. Any laxity or incompetency in this respect will be immediately reported to this office for necessary action.

(*b*) When reporting these cases, in addition to the data now required by telegraph, the word "onset" followed by the date of appearance of the initial symptoms of the disease will be included in each case. The "onset" or appearance of the initial symptoms will be obtained by careful inquiry into the history. In securing these data it must be understood that the date of "onset" is not necessarily the day on which the patient first reported sick or the date on which he was admitted to hospital, but rather should be regarded as the day when the patient first had any symptoms indicative of the disease.

(*c*) In reporting cases of typhoid or paratyphoid, in compliance with paragraph (*a*) above, the following classification will be observed:

1. All suspected cases of typhoid and paratyphoid will be reported as "Typhoid or paratyphoid suspect."

2. All cases which present a clinical picture of these diseases will be reported as clinical typhoid or paratyphoid, using the term "Clinical typhoid or paratyphoid."

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definite information will be submitted indicating that they have been reported previously as suspects or clinical cases.

(*d*) All reports outlined above will be sent by telegraph to the chief surgeon, American Expeditionary Forces. If the hospital unit reporting such cases is attached to one of the armies a duplicate of this report will be submitted to the chief surgeon of the army concerned, in such manner as he may indicate. If the hospital unit is under the orders of a section surgeon, surgeon of the District of Paris, or surgeon of the American embarkation center at Le Mans, a duplicate of this report will be submitted to the section, district, or embarkation center surgeon, in such manner as he may indicate.

Chief surgeons of the armies will establish close liaison with base, evacuation, and camp hospitals in the immediate vicinity of their commands, but not a part of their commands, to which patients from their commands are to be evacuated. If cases of typhoid or paratyphoid from armies are diagnosed in such camp, evacuation, base, or other hospitals, the commanding officers of such units will, in addition to the reports called for above, make immediate report of such cases by telephone, telegraph, or courier to the chief surgeon of the army concerned.

8. The special attention of all medical officers is invited to section 189, Article III, Manual Medical Department, quoted below, which will be strictly complied with:

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with anorexia, headache, and frequently with diarrhea, abdominal distress, and epistaxis. The pulse is not increased in proportion to the temperature, is of low tension and dicrotic. The tongue is coated and white and the abdomen distended and tender. From the seventh to the tenth day the rash appears in the form of slightly raised, flattened papules of from 2 to 4 mm. in diameter, which can be distinctly felt, are of a rose-red color, and fade on pressure. These rose spots, characteristic of typhoid and paratyphoid, appear singly or in crops, usually first on the skin of the abdomen and lower thoracic region, but may occur only on the back or extremities. The individual rose spot persists for from two to three days, after which it fades, leaving a brownish stain which persists for some time. Toward the end of the first week the spleen enlarges and its edge can be distinctly felt below the costal margin.

At the end of 10 days the symptom complex clinically characteristic of typhoid—continuous fever, rose spots, and enlarged spleen—is usually established. To this should have been added laboratory findings of absence of leucocytosis and in the majority of instances a positive blood culture, which occurs most frequently during the early stage of the disease. One negative blood culture will not suffice, but repeated examinations at 48-hour intervals will be made in suspicious cases.

During the second week there is continued high fever with slight morning remissions. The pulse becomes rapid and loses its dicrotic

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character, the patient becomes dull and stupid, the lips are dry, the tongue is dry and covered with a dirty brownish coat and tremulous. Abdominal symptoms when present—tympanites and diarrhea—are more pronounced and the clinical picture becomes one of intense toxemia. In the third week, in favorable cases, the morning remissions in temperature become more marked, the fever becomes distinctly remittent in type and toward the end of this period a gradual fall in temperature by lysis is noted. Rose spots cease to appear. In severe cases the pulse is weak, ranging from 110 to 130, and pulmonary complications, especially pneumonia and hypostatic congestion, may occur. The patient is dull and apathetic, and low-muttering delirium and subsultus tendinum are common. During the fourth week convalescence begins, the temperature gradually reaches normal, the abdominal symptoms subside, the tongue becomes clear, and the desire for food returns. In severe cases convalescence may be delayed until the fifth or even the sixth week, in which case the fever continues high during the fourth week and it is only toward the end of this period that marked daily remissions make their appearance.

In individuals previously vaccinated against typhoid but who have completely lost their immunity, infection similar to that found in the unvaccinated occurs, giving rise to the symptom complex described above as characteristic of typhoid fever.

Infections occurring in the vaccinated individual who still possesses a certain degree of resistance to infection result in the appearance of atypical clinical pictures, such as abortive types of typhoid and paratyphoid in which the constitutional symptoms are mild, with but slight febrile reaction of atypical type and few if any rose spots. The onset may be either insidious with headache, loss of appetite, and fatigue, or acute and associated with chills, vomiting, intestinal cramps, and diarrhea. Fever may be wholly absent or evanescent in character and determined only if observations are made within the first 48 to 72 hours. A low type of temperature, with daily fluctuations of from 98.6 to 100.4 suggestive of the presence of tuberculous disease may persist for a week to 10 days. It is in this class of cases that blood cultures taken early in the course of the disease, and repeated if negative, frequently give definite information concerning the nature of the infection. Ambulatory types of typhoid are not uncommon and the first indication of the existence of the disease may be furnished by the occurrence of intestinal hemorrhage or perforation.

The vaccinated individual protected against general systemic infection may still act as a carrier of typhoid infection, and frequently shows clinical manifestations of local disease of some portion of the gastrointestinal tract, while the characteristic symptom complex of

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typhoid fever due to general infection, namely, continued fever, rose spots, and enlarged spleen, may be wholly absent.

2. *Distinctive complications.*—Intestinal hemorrhage occurs usually during the third or fourth week. The onset is marked by a sudden and frequently pronounced fall in temperature associated with increased gravity of the general condition and a rise in pulse rate.

Intestinal perforation occurs usually during the third or fourth week. Patients whose sensorium is not too clouded complain of sudden paroxysmal abdominal pain, usually referred to the right hypogastric region. Signs of peritoneal irritation rapidly become manifest. Vomiting is common. Hiccough and irritability of the bladder with frequent micturition may be noted. Physical examination of the abdomen reveals tenderness and muscle rigidity, most marked in the right hypogastric or iliac region. Obliteration of liver dullness is frequently present and constitutes an important sign. Acute abdominal symptoms associated with a suddenly appearing leucocytosis are indicative of perforation. The occurrence of intestinal hemorrhage or signs of intestinal perforation in an individual giving a history of previous ill health should always lead to the suspicion of the existence of typhoid.

3. *Atypical modes of onset.*—(*a*) Acute onset with symptoms simulating meningitis. Lumbar puncture differentiates.

(*b*) Acute onset with intense, usually generalized bronchitis or symptoms suggestive of lobar or broncho-pneumonia.

(*c*) With chills, fever, vomiting, cramplike pain in abdomen, sometimes localized in right iliac fossa and suggesting appendicitis.

(*d*) With symptoms of acute nephritis. Attack begins suddenly with nausea, vomiting, pain in lumbar region, diminution in secretion of urine, which is highly colored, and contains albumin and casts.

(*e*) Special mention should be made of the ambulatory type of typhoid, in which the symptoms are slight, consisting simply of headache and lassitude associated with mild gastrointestinal disturbances. The patient is at no time confined to his bed and intestinal hemorrhage or perforation may furnish the first clue with regard to the existence of typhoid.

(*f*) In the above atypical modes of onset early blood cultures are of importance in differentiation.

4. *Paratyphoid fevers.*—The paratyphoid fevers due to infection with A or B organisms are evidenced clinically by the same general symptomatology as that of typhoid. They, however, as a rule run a much milder course and the intense toxemia of typhoid, evidenced by marked apathy, muttering delirium, and subsultus tendinum, is seldom present. The onset of paratyphoid is frequently more abrupt, with acute gastrointestinal symptoms resembling food

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poisoning. The intestinal symptoms are as a rule more marked in cases of infection with paratyphoid B than in cases in which paratyphoid A is the causative factor. The fever in paratyphoid is not of as long duration, nor is it as continuous as in typhoid, but is more distinctly remittent in type. Enlargement of the spleen, rose spots, and absence of leucocytosis are, as a rule, present in all three infections. Attempts have been made by some authorities to distinguish between the eruptions of paratyphoid A, paratyphoid B, and typhoid. Thus the spots in paratyphoid A are said to be larger, more macular in type, of a darker reddish hue, and to correspond more closely to the eruption of measles. However, histologically the rash is the same in all three instances, and it is doubtful if a clinical distinction in type of eruption can be maintained. Rose spots may be wholly lacking or may be profuse and widely distributed over the body surface. The occurrence of relapses is more frequent in paratyphoid than in typhoid proper, and particularly is that true in connection with type A infections. In contradistinction to the relapse of typhoid, that of paratyphoid is frequently more severe than the original attack. The distinction between mild typhoid, paratyphoid A and paratyphoid B can be made definitely only by the isolation of the infecting organism from cultures of the blood, urine or stools.

5. *Differential diagnosis.*—Influenza: Many cases originally diagnosed as influenza in the American Expeditionary Forces have subsequently proven to be typhoid. The symptoms which the two diseases have in common are continuous fever without localizing symptoms and slow pulse associated with absence of leucocytosis. The more abrupt onset, the intensity of the headache, the severe pain in the back and eyeballs, and the early prostration occurring in influenza are distinctive. Supposed influenza in which the fever persists for more than four days and which is not associated with signs of respiratory involvement, such as a bronchitis, usually most extensive in the lower lobes, a broncho or lobar pneumonia, should be viewed with suspicion. It should be remembered that a general bronchitis is not uncommon in typhoid. The appearance of rose spots should determine typhoid. Intestinal types of supposed influenza should always be considered as possible typhoid until proven otherwise.

Acute miliary tuberculosis.—A family history of association with tuberculosis individuals, a personal history of previous attack of pleurisy or pulmonary hemorrhages, physical signs of old tuberculous pulmonary lesions, cyanosis appearing early in the disease associated with increased rate of respiration, a greater irregularity of temperature curve, and a more rapid pulse with absence of dicrotism suggest acute miliary tuberculosis. Röntgenograms of the chest and blood cultures frequently give valuable differentiation.

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Septicemia: In cases of late typhoid admitted to the hospitals during or after three weeks of profound toxemia, together with the, by this time, distinctly remittent temperature, may suggest septicemia. The slight daily fluctuation in the general condition of the patient, together with the absence of chill and leucocytosis, suggest typhoid. Blood cultures will always be made in such cases, and, if negative, cultures of the stools will be made for the presence of typhoidlike organisms.

6. Local and unexplained gastrointestinal derangements, gastritis acute or chronic, diarrhea, dysentery, gastroenteritis, enterocolitis, colitis, appendicitis, cholecystitis, and acute catarrhal jaundice all occurring with or without fever should be regarded with suspicion when admitted from commands in which cases of typhoid or paratyphoid have occurred, and examination of the stools for the presence of typhoidlike organisms should be made.

Medical officers will see that all cases of gastrointestinal derangement enumerated above as well as all fevers of undetermined origin are subjected to careful clinical and laboratory supervision. They will under no conditions be left in quarters but will be sent at once to camp, evacuation, mobile, or base hospitals where accurate observation of temperature at four-hour intervals will be recorded for a period of at least four days. Blood cultures will be taken in every case of fever of undetermined origin in which the temperature has persisted for a period of 48 hours and if negative will be repeated provided unexplained fever persists from the second to the fourth day.

Daily physical examinations of such cases will be made, special attention being paid to physical examination of the abdomen for enlarged spleen, distention, and tenderness, either general or localized. A careful survey of the entire surface of the body will be made for the possible appearance of rose spots.

The precautions appropriate for a case of typical proved typhoid or paratyphoid fever must be observed in all instances where atypical or undetermined fevers are held under observation, awaiting clinical or bacteriological diagnosis of specific enteric infections. The frequency with which atypical, mild, unrecognized cases of typhoid and paratyphoid fever have occurred in the American Expeditionary Forces among vaccinated men makes it absolutely essential to surround all such cases of undetermined fever with the same precautions which it is found necessary to apply to established typhoid or paratyphoid patients, to avoid contact infections in the wards among other patients and hospital personnel.

7. Temperature records, clinical notes, and the original reports of laboratory findings in all cases of typhoid, paratyphoid, fevers of undetermined origin, and the above mentioned list of gastrointestinal

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disorders will accompany the patient if transferred to another medical unit and will be preserved and forwarded to the office of the chief surgeon as per instructions contained in Section VI, paragraphs 6–7, Sick and Wounded Reports, for American Expeditionary Forces, September 15, 1918. In no instance will the clinical notes, temperature, and laboratory records of these cases be destroyed upon the completion of the case.

V.—Laboratory Diagnosis of Typhoid and Paratyphoid Fevers.

Bacteriological procedures are of great value (1) for the certain and early diagnosis of suspected cases, (2) to determine carrier state in convalescent positive cases, (3) to detect carriers in otherwise normal individuals.

Blood cultures offer the most certain method for early diagnosis of undetermined fevers, and it should be kept in mind that the earlier in the disease the blood culture is taken the more likely is the result to be positive; thus, in positive typhoid fever, the chance of successful blood culture declines from 90 per cent during the first week to 40 per cent during the third week. In paratyphoid A fever, because of the frequently short and mild febrile period, the prompt and early blood culture is all the more necessary. Relapses are more common in paratyphoid than in typhoid, and taken at such a time, blood culture yields positive results in every case.

The following method of blood culture is recommended as being suitable in all cases of fever of undetermined etiology.

(*a*) When laboratory facilities are at hand, take 10 c. c. of blood from a vein at the elbow. Place 3 c. c. in each of two flasks containing 100 c. c. of plain broth. Place one c. c. in tube of agar (melted and cooled to 45° C.), immediately mix and pour plate. Place remainder of the blood in dry sterile test tube to separate serum for such serological tests as may be suggested.

The two flasks and plate are incubated and examined the following day. Transplants are made to plain agar slants, or better, Russell's double sugar agar. In case of development of gram-negative motile bacilli or agar slants, emulsions should be made and agglutination tests done with immune sera for final identification.

Frequency of nonagglutinability of recently isolated typhoid cultures should be kept in mind.[1] Negative blood culture in suspected typhoid fever means little. Repeat if clinical conditions indicate.

(*a*) If the blood culture specimen can not be taken directly to the laboratory, filtered sterile ox bile is most useful, 5 c. c. in a tube. To such sterile ox bile 5 c. c. of blood is added, the tube closed with a sterile paraffin cork, carefully packed and sent for examination to

[1] All strains of organisms of the typhoid paratyphoid group are of special interest and should be sent to the Central Medical Department Laboratory, A. P. O. 721.

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the nearest laboratory. Bile medium is furnished in chest No. 1 transportable laboratory, United States Army Expeditionary Force model. Additional supply of this medium may be obtained as needed from Central Medical Department Laboratory A. P. O. 721.

Bacteriological examination of the feces is second only to blood culture as an important means of positive diagnosis. It is especially important in paratyphoid B fever.

Typhoid or paratyphoid carriers.—Typhoid and paratyphoid patients excrete the bacilli, frequently with their urine and practically always in their feces. This is most likely to occur during the third and fourth week of the disease, the condition may persist throughout convalescence and not infrequently longer. It is, therefore, important not to release the convalescent typhoid or paratyphoid fever patient until he ceases to excrete these bacilli.

Three negative cultures of the urine and feces at six-day intervals should be required before release of patient, the first not earlier than one week after temperature curve has become normal.

Some persons who have never had a clinical history of the disease may excrete typhoid or paratyphoid bacilli. It is important to detect such carriers in any occupation, but especially among cooks and handlers of foodstuffs. In such a carrier survey two examinations should be done on each individual.

For release of patients therefore, and detection of carriers, the examination of feces is of especial importance. It is a procedure that properly requires the most careful attention of the bacteriologist. A bit of fresh feces the size of a pea (or better, when feasible, 1 c. c. of liquid stool, obtained, if diarrhea is not already present, by administration of a saline cathartic) is mixed with 10 c. c. of plain broth or sterile salt solution, then allowed to stand and sediment for 15 minutes. One or more loopfuls are taken from the top and placed on the surface of one plate of hardened Endo medium. This droplet is carefully carried over the surface by means of a glass elbow rod or similar spreader and without further inoculation, the same rod is used to seed a second Endo plate. In this way a satisfactory separation of the colonies may be secured. After incubation over night suspicious colonies are fished to plain agar, agar slants, or better, Russell's double sugar, and the identification completed by agglutination tests.

Evacuation of typhoid carriers.—Whenever it becomes necessary or desirable to evacuate a carrier of typhoid or paratyphoid fever to the United States, the carrier shall be evacuated as a patient on sick report.

The Widal test, in view of previous vaccination with T. A. B. vaccine, has been generally held of little or no value; however, it should be stated that the determination of agglutinin titer of patient's

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serum at intervals of one week and the demonstration of progressive and marked increase of agglutinin content of the blood offers, especially in the absence of positive blood culture, excellent evidence as to the etiology of the disease. Thus, in typhoid fever an agglutinin titer (Widal tes) of 1 to 40 during the first week of the disease may advance to 1 to 1,280 during convalescence. In paratyphoid B fever the titer frequently advances to 1 to 2,560; however, in paratyphoid A fever it may not reach 1 to 640. Formalinized and standardized bacterial suspensions of *B. typhosus*, *B. paratyphosus* A. and *B. paratyphosus* B. may be obtained on request from the Central Medical Department Laboratory, A. P. O. 721.

Post mortem bacteriology.—At autopsy, on suspected cases, cultures should be made from the mesenteric lymph glands and from the spleen.

VI.—Pathology.

1. The significant gross pathology of typhoid fever can be briefly summarized as an acute process found in the lymphoid elements of the intestine (chiefly the ileum) and in the enlargement and softening of the lymph nodes in the mesentery and mesocolon. These nodes in the immediate neighborhood of the lower end of the ileum, the appendix, and cæcum usually show the most marked change. The opened intestinal tract reveals hyperplasia of all the lymphoid elements such as Peyer's patches and the solitary follicles. There may be in most unusual cases only hyperplasia of these elements, but, as a rule they show injection, exudation, and rather extensive ulceration particularly in the lower end of the ileum. The lower third of the ileum is frequently the location of an ulcerated Peyer's patch or solitary follicle that may have perforated or may have become the source of considerable hemorrhage. The mucosa of the appendix and the cæcum are, in about one-third of the cases, also the seat of typhoid ulcers.

The spleen is usually enlarged and the pulp is semidiffluent. The parenchymatous organs are somewhat enlarged and have a cooked appearance suggesting cloudy swelling of a moderate or extreme degree. Broncho-pneumonia is frequently present as a terminal lesion. This represents the usual list of anatomical findings disclosed to gross examination; therefore, on opening the abdomen, the first important gross features that attract attention are the size of the lymph-nodes in the mesentery and the upper part of the mesocolon and the size and consistence of the spleen.

In children these structures may be misleading and in adults afflicted with tuberculosis a confusing gross picture can be offered, but in the Army of the American Expeditionary Forces composed of young adults any such picture found at autopsy should be thoroughly investigated. Such investigation calls for the removal of the in-

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testine and an examination of the intestinal mucosa for lesions related to the lymphoid elements. Any change noted should be followed with supporting evidence gained by bacteriological examination.

It should be kept in mind that the American Army has been vaccinated against typhoid, and as a result, the gross pathological picture may not be as clear as in unprotected individuals. Indeed, several protocols received indicate that there are fewer gross lesions in the intestine and that they are prone to appear in the ileum at points very near the ileo-cæcal valve and even in the appendix and cæcum. Other records indicate that death probably occurred during a relapse, since there was evidence of a few almost healed ulcers near the location of one or more acute ulcers, one of which had perforated.

Cases of typhoid may escape attention at autopsy if early and complete regional examinations are not conducted and recorded in a methodical manner, and it is imperative that the pathologist support any suspicion of typhoid fever gained on gross examination by a well-conducted post mortem bacteriological examination. Cultures taken from the gall bladder and from the lumen of the bowel may offer the only positive findings of a "carrier" of the disease. Cultures offering the pathologist the best support may be taken from the spleen and lymph nodes in the drainage path of actual intestinal lesions.

Cases possessing the pathology and bacteriology of typhoid should be entered under the cause of death, at the close of protocol as typhoid fever, and then, if desired, follow in parenthetical manner with any important sequel present, such as "perforation." Several protocols have been received in which the complete pathological and bacteriological pictures of typhoid fever were recorded but the cause of death was entered as "peritonitis," "perforation of the intestine," "broncho-pneumonia," "acute enterocolitis."

Attention is directed to Section XVII of the pamphlet Sick and Wounded Reports (effective Sept. 15, 1918). All diagnoses should conform to these instructions if a proper record of disease is to be made.

VII.—Prevention and Control of Typhoid and Paratyphoid Fevers.

Typhoid fever is increasing in the American Expeditionary Forces—so are the paratyphoid fevers.

Vaccination is a partial protection only and must be reenforced by sanitary measures.

Faulty conditions of sanitation that may not be dangerous now will become serious menaces when the warm weather sets in. There is still time to correct many of these conditions. If this is not done

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many soldiers will not get back to the United States after completion of their arduous service and it will be in part your fault and our responsibility.

The means of conveyance are water and food. Water may be contaminated by drainage from latrines and indiscriminately deposited defecations. Food may be contaminated by hands of carriers; by flies that come to it from latrines and uncovered feces; therefore,

Remember: That all water in France is regarded as contaminated unless it is under constant supervision of water supply personnel. See that General Order 131, general headquarters, 1918, is carried out. Don't give orders only—personally assure yourself that chlorination is properly carried out. The responsibility ultimately falls upon those charged with sanitary control and not upon the enlisted man who mixes the hypochlorite of lime with the water. Study the means of prevention of drinking at unauthorized sources. The best way to do this is to see that an adequate supply of supervised water is conveniently available wherever men work or live. Other means are the marking of water points, the removal of faucets, the placing of guards, and last but most important, the education of the men.

Remember: That the most dangerous carriers are the ones that work in the kitchens. Enforce the washing of hands by kitchen personnel before the preparation and serving of food. Do not leave this to orders alone. Have a reliable officer or National Guard officer supervise this, and see that the means of washing are on hand. Also remember that many cooks who have been found to be carriers have often given histories of recent intestinal disturbance; therefore inspect your kitchen personnel at least twice a week and remove all those who are suffering or have recently suffered from diarrheas. Repeated attacks of diarrhea are particularly suspicious.

Remember: That flies breed in manure, feces, and offal of many kinds. Policing of camp and the proper disposal of all such filth will keep down the number of flies. A campaign of such policing if now undertaken should go far to yield results by spring. Flies alone can not spread these diseases if latrines are covered and access to feces prevented. Look at the lids on your latrines. Correct the conditions which lead to uncovered feces in camps. Keep the food covered, so that any flies that get through this cordon can not get at it.

Remember: That an outbreak of diarrhea may mean typhoid fever. At any rate the occurrence of epidemic diarrhea shows that there is a hole in your sanitary plan.

Remember: That even though your camp is a model one the neighboring civilian population may be a source of danger. Try to keep informed of typhoid-like disease in the civilian population where you are stationed.

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disturbance.

Prohibit the use of all uncooked vegetables and unboiled milk.

Investigate the conditions of the neighboring civilian population as to prevalence of typhoid or typhoid-like fevers.

2. When two or more cases occur in the same command within the same two weeks, revaccinate the entire command in addition to the above precautions.[1] If the outbreak takes on epidemic proportions, add to these precautions the handwashing of all men after defecation.

Further measures of control must be determined after epidemiologic study of the individual situation.

Whenever typhoid or paratyphoid fever occurs in any command, the medical officer will address the officers and the men, at either roll call or retreat, instructing them in the mode of spread of intestinal diseases, in the seriousness of the situation and in the simple methods of personal hygiene, the importance of cleanliness, and the purposes of the sanitary regulations instituted for control of these diseases.

3. The special attention of all officers of the Medical Department is invited to sections 184 and 185, Article III, Manual of the Medical Department. Compliance is enjoined.

4. All previous instructions from this office in conflict with regulations prescribed herein are rescinded.

WALTER D. MCCAW,
Colonel, Medical Corps, Chief Surgeon.

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[1] Directions for vaccination with Triple T. A. B. lipo-vaccine are being issued with the vaccine.

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[A copy of these instructions will accompany each shipment of Vaccine.]

Directions for Vaccination with Triple T. A. B. Lipo-Vaccine.

1. *Records.*—(*a*) Prepare a list in duplicate of the officers and men of the organization, giving name, serial number and rank. Inspect all those appearing on the list, taking the temperature of any individual who looks sick. No person will be vaccinated who is not in perfect health and free from fever (99.6° F. or over). Keep a record of those who are not vaccinated because of temporary unfitness, and when they are in good physical condition, vaccinate them.

(*b*) Enter upon the service record and upon the individual pay book the date of vaccination and the type and dose of vaccine given.

2. *Dose.*—A single dose of 1 c. c. of the Triple T. A. B. lipo-vaccine fulfills the vaccination requirements.

3. *Procedure.*—(*a*) Sterilize the skin with tincture of iodine; warm the vaccine to body temperature to facilitate the flow of the oil; do not overheat (when the vaccine stands in the cold a precipitate may appear, which will disappear on warming).

(*b*) Shake the ampoule well before loading the syringe.

(*c*) It is necessary to use a large bore needle (with a well sharpened point, the large bore needle causes no more pain than a small bore needle).

(*d*) *The injection is to be given subcutaneously*, not intramuscularly or intracutaneously; special care must be taken to avoid introduction of the vaccine into a vein. raise a fold of the skin between the thumb and finger, pass the needle at least one-half inch through the skin into the subcutaneous tissue and then inject the vaccine into the subcutaneous tissue of the fold.

(*e*) The puncture opening in the skin made by the large size injecting needle tends to permit escape of the oil; to prevent this, press a small iodine swab firmly against the puncture hole for a few minutes or until exudation from the hole has ceased; this procedure will prevent the occurrence of superficial infections which are apt to follow if the puncture hole is permitted to remain open and the clothing is immediately pulled down over it.

4. *Aftercare.*—(*a*) Avoid rubbing or massaging the site of the injection.

(*b*) Abstinence from alcoholic drinks must be enforced for two days after the inoculation.

(*c*) It is advisable to give the vaccine in the afternoon, and to relieve those vaccinated from duty for at least 24 hours, and if local or systemic reaction persists for a longer period.

PUBLICATIONS RELATING TO TYPHOID FEVER AND WATER SUPPLY.

PUBLIC HEALTH BULLETINS.

51. The Causation and Prevention of Typhoid Fever. By L. L. Lumsden. November, 1911.
68. Safe Disposal of Human Excreta at Unsewered Homes. By. L. L. Lumsden, C. W. Stiles, and A. W. Freeman. April, 1915.
69. Typhoid Fever: Its Causation and Prevention. By. L. L. Lumsden. May, 1915.
70. Good Water for Farm Homes. By A. W. Freeman. May, 1915.
89. A Sanitary Privy System for Unsewered Towns and Villages. By L. L. Lumsden. August, 1917.
91. Rural Sanitation. A Report on Special Studies Made in 15 Counties in 1914, 1915, and 1916. By. L. L. Lumsden. October, 1918.

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REPRINTS FROM PUBLIC HEALTH REPORTS.

46. What the Local Health Officer Can Do In the Prevention of Typhoid Fever. By L. L. Lumsden. 1912.
76. The Necessity for Safe Water Supplies in the Control of Typhoid Fever. By Allen J. McLaughlin. 1912.
80. Examination of the Excreta for Typhoid Bacilli. By L. L. Lumsden and A. M. Stimson. 1912.
Report on an Outbreak of Typhoid Fever at Lincoln, Nebr., in 1911. By L. L. Lumsden. 1912.
204. What is a Safe Drinking Water? By Allen J. McLaughlin. June 26, 1914.
232. Bacteriological Standard for Drinking Water. The Standard Adopted by the Treasury Department for Drinking Water Supplied the Public by Common Carriers in Interstate Commerce. November 6, 1914.
362. The Sewage Pollution of Streams. By W. H. Frost. September. 15, 1916.
389. Relation of Milk Supplies to Typhoid Fever. By W. H. Frost. December 1, 1916.
395. Typhoid Fever and Municipal Administration. By A. W. Freeman. May 4, 1917.
453. Effect of Freezing on the Organisms of Typhoid Fever and Diphtheria. By Joseph Bolten. February 8, 1918.

SUPPLEMENTS TO PUBLIC HEALTH REPORTS.

23. Typhoid Fever. A Report of a Water-Borne Outbreak in Decatur and New Decatur, Ala. By Paul Preble. March 7, 1915.
29. The Transmission of Disease by Flies. By Ernest A. Sweet. May, 1916.

Copies of any of these publications may be obtained by addressing the United States Public Health Service, Washington, D. C.

TYPHUS EXANTHEMATICUS.

Rotterdam.

Immediately after the signing of the armistice, when it was apparent that soldiers, crews of vessels, and prospective immigrants would be arriving in the United States, the Public Health Service took steps to make certain that these would not be the means of bringing dangerous communicable diseases into the country. Several experienced commissioned medical officers were sent abroad to confer with the military and naval authorities in charge of the return of the soldiers, and to take such other steps as would make certain that dangerous communicable diseases would not be carried into the United States.

Early in February an officer of the Public Health Service reported the occurrence of a considerable number of cases of typhus fever in Rotterdam, the disease having apparently been introduced by prisoners of war. As a result of this discovery, steps were at once taken to establish and enforce quarantine restrictions on all vessels bound for the United States or its dependencies. These restrictions will

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affect about 90 to 100 vessels a month, almost all of them being "Belgian relief" vessels. The following rules and regulations have been issued:

"First. Personnel and crew must be inspected by a medical officer of the United States Public Health Service attached to the consulate general of the United States at this port before a bill of health will be delivered.

"Second. Application for the bill of health should be made upon the proper form at least 24 hours before the intended departure of the vessel in order to avoid delay.

"Third. Crews of all vessels and such other persons on board as may be deemed necessary must be bathed, examined for the presence of vermin and disease, and their clothing properly disinfected. After such bathing and disinfection no such person shall leave the vessel.

"Fourth. Steerage and other passengers arriving from localities infected with typhus or other quarantinable disease will not be allowed on board until they have been bathed, their clothing disinfected, and then shall have been held under observation in a place acceptable to the medical officer of the Public Health Service for a period of 12 days.

"Fifth. Shipment of merchandise in general will not be interfered with; shipment of rags and second-hand clothing will not be accepted until written approval of the medical officer has been obtained and until such measures as he may deem necessary and advisable have been complied with."

Macedonia.

In connection with the above, attention is called to a cable from the Red Cross representative in Greece, according to which there is still considerable typhus in eastern Macedonia, traceable entirely to Greek refugees returning from Bulgaria. (See Public Health Reports, Mar. 21, p. 589.)

THE NATION'S PHYSICAL FITNESS.

ABSTRACT FROM SECOND REPORT OF THE PROVOST MARSHAL GENERAL.

In an instructive chapter of some 19 pages the Second Report of the Provost Marshal General summarizes the data relating to the physical qualifications of the men examined for military service under the selective-draft law during the period December 15, 1917, to September 11, 1918. Inasmuch as the data pertain to 3,208,446 men physically examined it is evident that they furnish an unparalleled source of information regarding the physical condition of the Nation's manhood.

For this reason, and in order to make this material conveniently available for public-health officers, the following rather full abstract has been prepared. It is earnestly hoped that health officers will

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carefully study the data here presented and cooperate with Federal, State, and local health authorities in making effective use of the lessons they teach.

Physical Examination System.

Before passing to the interesting results disclosed by the examinations, it may be well to mention the composition of the physical examination system established under authority of the selective-draft act. Briefly, this was composed as follows:

(*a*) A medical division in the Provost Marshal General's office.

(*b*) An Army medical officer detailed to the staff of the governor of each State.

(*c*) An examining physician for each local board.

(*d*) A medical advisory board of specialists to assist examining physicians for the local board.

(*e*) Each district board numbered among its membership a physician who acted as expert advisor upon medical evidence.

(*f*) Camp surgeons for the examination upon arrival at camps.

Standards of Physical Qualifications.

The examinations covered in this report were made according to a new standard of physical qualifications according to which the men were classified into four groups as follows:

Group A was composed of men who were vigorous and without any physical defect which might interfere with the full performance of military duties. (In order to include many thousands of vigorous individuals who were physically competent for military duty the minimum for height and weight was from time to time lowered after April, 1917, until it reached its minimum of 5 feet for height and 110 pounds for weight.)

Group B was made up of individuals who possessed certain physical defects, diseases, or abnormalities which rendered them unfit for service, but which conditions were susceptible of cure by treatment, surgical or otherwise, whereby the registrants might be fitted for general military service. Group B is therefore known as the "deferred remediable" group.

Group C contained those men who were physically substandard for full military duties, but who were capable of rendering services of value to the Military Establishment in vocations which did not impose too great strain.

Group D contained those who were found to have defects which unfitted them for military service.

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The results of the physical examinations were as follows, by groups:

Physical groups compared.

		Number.	Per cent of registrants.	Per cent of examined.
1	Total registrants Dec. 15, 1917, to Sept. 11, 1918, due to be classified	9,952,735	100.00	.....
2	Not physically examined	6,744,289	67.76	.....
3	Examined physically Dec. 15, 1917, to Sept. 11, 1918	3,208,446	32.24	100.00
4	Fully qualified (Group A)	2,259,027	.....	70.41
5	Disqualified partly or totally	949,419	.....	29.59
6	Placed in Group B	88,436	.....	2.76
7	Placed in Group C	339,377	.....	10.58
8	Placed in Group D (Class V-G)	521,606	.....	16.25

Physical groups, by States.

	Total examined physically.	Physically qualified, Group A.	Per cent of examined.	Remediable, Group B.	Per cent of examined.	Limited service, Group C.	Per cent of examined.	Physically disqualified, Group D.	Per cent of examined.
United States	3,208,446	2,259,027	70.41	88,436	2.76	339,377	10.58	521,606	16.25
Alabama	69,284	53,717	77.53	1,363	1.97	4,814	6.95	9,390	13.55
Arizona	8,979	4,941	55.03	166	1.85	738	8.22	3,134	34.90
Arkansas	58,928	46,560	79.02	929	1.57	3,782	6.33	7,705	13.08
California	67,772	41,135	60.70	1,375	2.03	10,578	15.61	14,684	21.66
Colorado	30,087	17,760	59.06	587	1.95	5,131	17.05	6,609	21.97
Connecticut	38,631	22,721	58.82	1,700	4.40	6,411	16.60	7,799	20.19
Delaware	7,003	4,599	65.67	25	.36	1,473	21.03	906	12.94
District of Columbia	12,538	9,009	72.32	490	3.91	1,530	12.21	1,449	11.56
Florida	32,780	24,659	75.23	573	1.75	2,794	8.52	4,754	14.50
Georgia	84,191	61,527	73.08	1,705	2.02	7,362	8.74	13,597	16.15
Idaho	15,871	11,250	70.89	762	4.80	1,508	9.87	2,203	14.88
Illinois	225,127	163,507	72.63	5,727	2.54	21,334	9.48	34,559	15.35
Indiana	74,356	53,811	72.37	1,604	2.15	7,576	10.19	11,365	15.29
Iowa	78,272	60,364	77.13	1,797	2.29	5,181	6.62	10,930	13.96
Kansas	48,609	38,148	78.38	1,215	2.50	3,287	6.75	6,019	12.37
Kentucky	75,024	58,356	77.78	1,208	1.61	4,478	5.97	10,982	14.64
Louisiana	66,142	50,571	76.46	1,464	2.21	4,898	7.39	9,209	13.92
Maine	22,046	14,505	65.19	617	2.73	3,378	14.92	3,886	17.63
Maryland	38,392	26,237	68.35	943	2.45	4,197	10.93	7,015	18.27
Massachusetts	108,356	62,216	57.42	3,747	3.46	22,192	20.48	20,201	18.64
Michigan	115,412	70,726	61.28	4,089	3.54	13,844	12.00	26,853	23.27
Minnesota	81,862	62,199	75.98	1,155	1.41	5,930	7.24	12,578	15.36
Mississippi	55,615	43,376	77.99	951	1.71	3,467	6.24	7,821	14.06
Missouri	115,030	83,049	72.99	2,742	2.38	9,319	8.10	19,920	17.32
Montana	31,547	23,159	73.40	727	2.31	3,667	11.59	4,094	12.98
Nebraska	41,046	32,555	78.18	850	2.04	2,864	6.87	5,577	13.39
Nevada	3,482	2,407	69.13	143	4.11	435	12.49	497	14.27
New Hampshire	12,258	7,793	63.57	247	2.02	2,552	20.82	1,666	13.59
New Jersey	93,964	62,489	66.50	2,458	2.62	14,151	15.06	14,866	15.82
New Mexico	11,783	9,206	77.59	239	1.99	723	6.03	1,725	14.39
New York	315,336	192,311	60.95	12,631	4.00	49,670	15.74	60,924	19.31
North Carolina	75,198	55,215	73.14	1,393	1.84	7,051	9.34	11,539	15.28
North Dakota	25,151	19,498	77.52	256	1.02	1,648	6.55	3,749	14.91
Ohio	166,177	120,142	72.29	4,925	2.96	18,176	10.94	22,934	13.80
Oklahoma	65,374	54,145	82.82	1,249	1.91	3,588	5.49	6,392	9.78
Oregon	23,936	16,562	69.10	657	2.74	3,243	13.51	3,474	14.50
Pennsylvania	246,884	171,101	69.30	10,833	4.39	27,632	11.19	37,318	15.12
Rhode Island	15,395	8,264	53.68	574	3.73	2,143	13.92	4,414	28.67
South Carolina	40,197	28,091	69.88	1,478	3.68	3,696	9.20	6,932	17.25
South Dakota	25,806	19,718	76.41	1,183	4.58	1,775	6.88	3,130	12.13
Tennessee	70,367	51,319	72.93	1,459	2.07	5,826	8.28	11,763	16.72
Texas	141,586	101,862	71.94	2,276	1.73	7,334	5.57	20,114	14.21
Utah	14,844	9,752	70.45	375	2.71	1,721	12.42	1,996	14.42
Vermont	10,761	6,956	56.28	364	3.38	1,914	17.79	2,457	22.83
Virginia	68,177	49,146	72.08	1,160	1.70	5,390	7.91	12,481	18.31
Washington	37,581	20,800	55.35	1,022	2.72	7,179	19.10	8,580	22.83
West Virginia	71,473	40,047	77.81	710	1.37	3,242	6.30	7,474	14.52
Wisconsin	90,541	64,579	71.35	4,158	4.59	7,974	8.81	13,830	15.28
Wyoming	8,279	6,528	78.85	135	1.63	563	7.16	1,053	12.72

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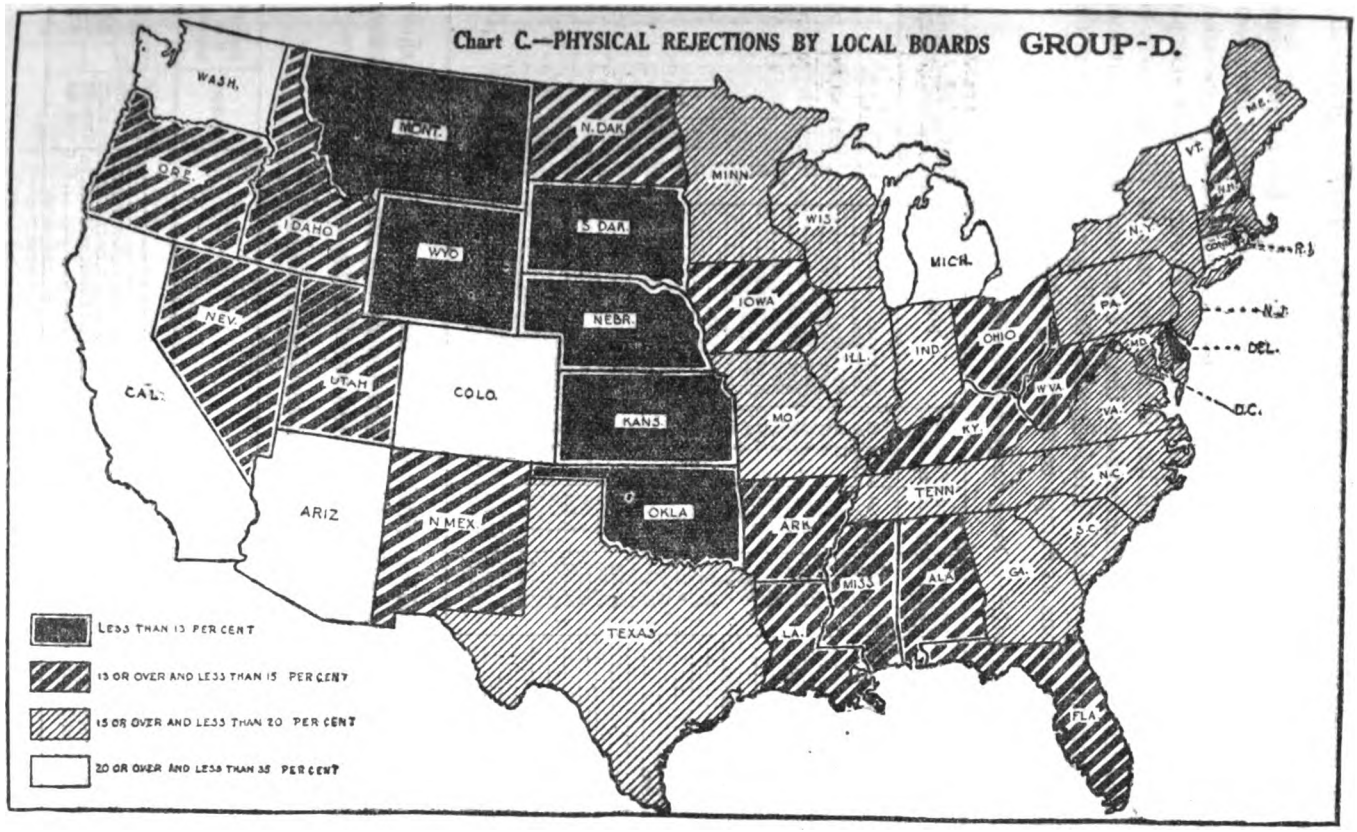

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The number found disqualified for any military service, i. e., those belonging to Group D, by the local boards, averaged 16.25 per cent and varied considerably according to States. This is graphically shown on the shaded map on page 627.

It appears that the examinations by the local board physicians were everywhere too liberal, i. e., many more men should have been put into Group D. However, there was considerable variation according to States as to the acceptances in Group A. For example the camp surgeons rejected less than 5 per cent of the men sent to camp from Maryland whereas more than 14 per cent of those sent from Alabama were rejected. The following table gives the results of the physical rejections at camps compared by States:

Physical rejections at camp, compared by States, Feb. 10 to Nov. 1, 1918.

States.	Total inducted.	Total rejected.	Per cent rejected.	States.	Total inducted.	Total rejected.	Per cent rejected.
United States....	2,124,293	172,000	8.10	Montana.....	19,671	1,445	7.35
				Nebraska.....	24,130	1,471	6.10
Alabama.....	50,779	7,189	14.16	Nevada.....	1,928	134	6.95
Arizona.....	4,709	272	5.67	New Hampshire.....	6,755	494	7.31
Arkansas.....	41,178	3,056	7.42	New Jersey.....	58,864	4,593	7.80
California.....	43,147	2,842	6.59	New Mexico.....	6,900	463	6.71
Colorado.....	17,752	1,092	6.15	New York.....	193,237	17,194	8.90
Connecticut.....	23,031	1,178	5.11	North Carolina.....	51,680	4,527	8.76
Delaware.....	3,815	342	8.96	North Dakota.....	16,114	1,028	6.38
District of Columbia...	8,430	480	5.69	Ohio.....	112,114	6,551	5.84
Florida.....	23,729	2,068	8.72	Oklahoma.....	50,636	3,920	7.74
Georgia.....	56,534	7,041	12.45	Oregon.....	15,184	1,451	9.56
Idaho.....	9,592	855	8.91	Pennsylvania.....	154,930	14,999	9.68
Illinois.....	145,063	9,308	6.46	Rhode Island.....	9,096	673	7.40
Indiana.....	58,418	3,047	5.22	South Carolina.....	37,104	3,453	9.31
Iowa.....	61,889	3,346	5.41	South Dakota.....	18,715	1,299	6.94
Kansas.....	37,572	2,844	7.57	Tennessee.....	45,861	4,827	10.52
Kentucky.....	49,350	3,235	6.56	Texas.....	94,694	4,851	5.12
Louisiana.....	43,116	4,476	10.38	Utah.....	8,075	525	6.50
Maine.....	14,114	1,336	9.47	Vermont.....	5,291	492	9.30
Maryland.....	26,678	1,318	4.94	Virginia.....	63,791	5,667	12.46
Massachusetts.....	60,178	4,953	8.23	Washington.....	20,202	1,425	7.06
Michigan.....	72,899	6,287	8.62	West Virginia.....	27,079	2,755	10.17
Minnesota.....	61,109	3,566	5.84	Wisconsin.....	58,852	4,277	7.26
Mississippi.....	38,546	4,060	10.53	Wyoming.....	7,117	459	6.45
Missouri.....	74,595	8,055	10.80				

Urban and rural physical rejections compared.—The report shows that there was considerable difference in the number of rejections (Group D men) between urban and rural areas.

Rural and urban physical rejections compared.

	Number	Per cent of examined.
Total examined in 100 selected urban and rural regions.....	200,000	.....
Rejected in 100 selected urban and rural regions.....	25,389	12.70
Examined in urban regions.....	100,000	.....
Rejected in urban regions.....	21,675	21.68
Examined in rural regions.....	100,000	.....
Rejected in rural regions.....	18,194	18.19

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Colored and white physical rejections compared.—The report also gives the following table comparing the rejections among colored and white registrants:

Colored and white physical rejections compared.

		Number.	Per cent of examined.	Per cent of partial disqualifications.
1	Total, colored and white examined Dec. 15, 1917, to Sept. 11, 1918..	3,208,446	100.00	.....
2	Group A	2,259,027	70.41	.....
3	Disqualified partly or totally	949,419	.....	100.00
4	Group B	88,436	2.76	9.31
5	Group C	339,377	10.58	35.75
6	Group D	521,606	16.25	54.94
7	Total, colored examined	458,838	100.00	.....
8	Group A	342,277	74.60	.....
9	Disqualified partly or totally	116,561	.....	100.00
10	Group B	9,605	2.09	8.24
11	Group C	27,474	5.99	23.57
12	Group D	79,482	17.32	68.19
13	Total, white examined	2,749,608	100.00	.....
14	Group A	1,916,750	69.71	.....
15	Disqualified partly or totally	832,858	.....	100.00
16	Group B	78,831	2.87	9.47
17	Group C	311,903	11.34	37.45
18	Group D	442,124	16.08	53.08

Alien and native physical rejections compared.—There is also contained in the report the following table, comparing the number of rejections in communities predominantly alien with that in communities predominantly native:

Physical rejections in alien and native communities compared.

		Number.	Per cent of examined.
1	Total number of records of examination compared in dominant alien and native communities	184,854	.....
2	Rejected (Group D)	28,184	15.25
3	Total compared, alien communities	84,723	.....
4	Rejected (Group D)	14,525	17.14
5	Total compared, native communities	100,131	.....
6	Rejected (Group D)	13,659	13.64

In order to give an important clue as to the differences as to physical fitness, according to age, there is published a table which compares the age 21 group with the ages 21–30 group.

Age 21 physical rejections, compared with ages 21–30.

		Ages 21–30, examined Dec. 15, 1917–June 5, 1918.		Age 21, examined June 5–Sept. 11, 1918.	
		Number.	Per cent.	Number.	Per cent.
1	Total registrants physically examined	2,693,448	100.00	514,998	100.00
2	Fully qualified (Group A)	1,863,047	69.17	395,980	76.89
3	Disqualified partly or totally	830,401	30.83	119,018	23.11
4	Group B	75,120	2.79	13,316	2.59
5	Group C	284,824	10.57	54,553	10.59
6	Group D	470,457	17.47	51,149	9.93

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Percentages for causes of rejections by local boards and camp surgeons, and for discharges from the Army of recently inducted men, Feb. 10 to Nov. 1, 1918. (Heavy face type indicate rates 25 per cent or more above the rate for the United States.)

State.	Total.	Alcohol and drugs.	Bones and joints.	Developmental defects.	Digestive system, diseases of.	Ears, disease of.	Eyes, disease of.	Flat foot (pathological).	Genito-urinary (venereal).	Genito urinary (nonvenereal).	Heart and blood vessels.	Hernia.	Mental deficiency.	Nervous and mental disorders.	Respiratory (tuberculous).	Respiratory (nontuberculous).	Skin, disease of.	Teeth.	Disease of thyroid.	Tuberculosis (nonrespiratory).	All other defects.	Cause not given.
United States	467,694	0.4	12.3	8.4	0.5	4.4	10.6	3.8	1.3	1.3	13.1	6.0	5.2	5.1	8.7	1.7	2.7	3.1	1.8	0.9	3.1	5.4
Alabama	13,372	.1	12.5	8.0	.3	1.7	7.2	4.0	1.0	1.3	14.5	6.0	8.7	4.5	0.9	1.3	1.2	2.8	.4	.6	2.6	14.5
Arizona	1,703	.3	10.0	3.4	.7	4.0	7.9	2.1	1.3	.8	9.9	1.8	1.0	3.0	34.8	1.6	2.1	1.3	.4	1.2	8.2	4.2
Arkansas	9,953	.2	13.9	8.4	.4	3.2	10.4	5.8	1.7	.7	13.3	6.6	7.4	4.7	8.9	1.8	4.9	.8	.3	.9	2.9	2.6
California	4,196	1.5	8.6	2.9	.3	3.2	5.7	6.8	2.0	.6	11.1	5.7	2.8	5.5	11.4	.8	.4	3.8	.6	.2	.7	25.2
Colorado	5,132	.4	11.3	8.7	.4	5.2	8.5	3.4	.8	1.2	12.2	5.3	3.5	4.9	20.2	2.8	2.2	1.6	1.4	1.5	3.4	1.3
Connecticut	9,427	.3	9.1	9.6	.5	6.9	17.1	2.4	.4	1.5	14.8	3.1	4.4	5.4	10.1	1.9	3.3	1.6	.8	1.5	3.0	2.4
Delaware	435	5.0	12.2	7.1	.5	5.3	8.3	9.7	2.1	1.8	9.0	6.9	2.9	4.8	6.4	2.5	.....	5.5	1.8	.....	.2	6.9
Dist. Columbia	698	.....	9.7	6.4	.6	5.0	9.3	4.0	4.0	1.1	12.9	6.6	5.2	9.9	4.4	3.2	.6	5.9	4.6	.1	1.4	5.0
Florida	4,789	.2	12.9	7.8	.4	1.8	7.9	2.7	2.8	1.0	10.3	7.4	3.4	4.1	7.6	1.7	4.3	2.3	.2	.4	4.3	16.4
Georgia	19,140	.2	15.6	14.6	.4	2.2	8.5	3.0	1.5	.8	14.4	5.0	5.1	4.0	7.8	1.1	4.3	4.6	.6	1.1	2.6	2.5
Idaho	1,124	.....	13.4	4.6	.5	5.0	8.2	10.9	.9	.8	12.4	8.1	2.5	3.6	4.3	.5	1.5	5.7	4.0	.4	3.4	9.3
Illinois	28,999	.7	11.6	6.6	.6	5.7	13.6	4.0	2.1	1.4	12.1	6.1	4.2	5.7	9.0	1.3	1.1	2.1	2.7	.9	2.9	5.6
Indiana	14,495	.1	12.5	9.3	.7	4.4	9.6	2.3	1.3	1.2	11.7	7.0	5.4	5.4	10.9	1.8	5.0	2.1	1.7	1.4	2.7	3.7
Iowa	14,670	.2	13.0	9.7	.8	4.5	10.5	3.8	.4	.8	14.2	6.0	5.9	3.9	6.8	1.5	5.0	3.1	1.7	.9	5.0	2.1
Kansas	8,155	.3	12.9	2.2	.7	3.4	9.4	3.5	1.3	1.1	12.2	7.7	5.5	5.0	9.8	2.5	7.5	1.3	2.1	.5	9.0	2.1
Kentucky	9,628	.4	10.5	9.4	.6	3.6	10.4	1.3	1.4	.9	8.5	7.0	8.4	5.2	15.2	2.0	5.8	2.6	.8	1.1	2.1	2.6
Louisiana	10,514	.1	13.7	7.2	.6	2.5	9.1	2.9	5.9	1.3	12.8	5.2	7.0	5.1	10.9	1.9	1.8	5.6	.5	.6	2.6	2.9
Maine	1,911	.3	10.3	9.2	.5	2.8	5.1	13.1	1.3	2.2	14.1	8.3	7.2	4.9	3.6	2.8	1.3	5.5	.4	.1	1.0	5.8
Maryland	6,025	.2	8.1	6.7	.5	5.8	15.2	2.4	.9	.8	16.3	2.5	8.9	6.3	11.5	1.5	.8	1.7	1.4	1.2	4.2	3.1
Massachusetts	22,425	.5	8.8	13.7	.5	5.8	14.0	3.3	.4	1.3	14.9	3.6	2.7	4.0	7.8	1.6	3.2	4.2	.3	1.0	4.4	2.0
Michigan	20,045	.2	11.4	5.6	.5	5.0	10.4	3.2	.9	1.0	22.8	7.1	5.1	4.7	7.6	1.2	1.0	4.2	3.1	.7	3.0	1.4
Minnesota	16,008	.2	13.9	7.8	.5	4.1	8.4	3.3	.7	1.7	13.8	6.5	5.6	4.6	7.1	1.1	5.4	4.8	2.2	1.4	3.9	2.9
Mississippi	11,146	.2	16.1	5.9	.9	2.1	6.9	4.8	5.0	1.9	11.5	7.5	7.5	4.9	9.3	1.1	4.2	3.2	.5	.9	3.4	2.1
Missouri	14,595	1.1	10.9	4.7	.5	4.5	11.6	6.7	2.1	1.5	11.1	5.7	5.4	5.9	11.2	1.9	.7	1.4	3.9	.5	1.4	4.0
Montana	3,456	.5	13.0	5.8	.5	4.9	11.4	5.4	.5	.9	17.1	7.2	2.0	2.4	5.6	1.0	1.1	6.4	2.2	1.1	2.6	6.9
Nebraska	4,835	.4	12.9	6.6	.8	3.5	12.1	4.7	1.1	1.5	13.3	6.8	3.9	3.1	7.7	1.4	2.0	2.3	1.2	.9	6.6	4.5
Nevada	634	.3	11.4	7.2	.3	5.2	10.3	2.8	.9	.2	11.7	6.9	1.6	2.8	10.7	1.3	6.1	3.1	.2	.6	7.2	5.2
New Hampshire	1,384	.1	10.0	11.2	.4	5.6	11.8	5.8	.5	2.3	13.7	4.9	4.3	5.5	7.4	2.0	.5	5.5	.3	1.7	2.3	4.6
New Jersey	6,060	1.2	10.9	12.6	.4	7.1	9.4	5.6	.4	2.0	7.3	5.1	2.7	4.7	4.3	1.4	.4	6.6	1.7	.1	1.0	6.4
New Mexico	1,699	.2	9.9	7.4	.5	2.3	10.9	2.1	1.1	1.4	9.6	4.1	2.3	2.9	20.5	2.1	2.5	1.6	.9	.9	2.3	2.5

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Percentages for causes of rejections by local boards and camp surgeons, and for discharges from the Army of recently inducted men, Feb. 10 to Nov. 1, 1918. (Heavy face type indicate rates 25 per cent or more above the rate for the United States)—Continued.

State.	Total.	Alcohol and drugs.	Bones and joints.	Developmental defects.	Digestive system, diseases of.	Ears, disease of.	Eyes, disease of.	Flat foot (pathological).	Genito-urinary (venereal).	Genito urinary (non-venereal).	Heart and blood vessels.	Hernia.	Mental deficiency.	Nervous and mental disorders.	Respiratory (tuberculous).	Respiratory (non-tuberculous).	Skin, disease of.	Teeth.	Disease of thyroid.	Tuberculosis (non-respiratory).	All other defects.	Cause not given.
New York	24,970	**1.7**	8.7	8.4	.3	**5.9**	11.7	**7.8**	1.0	1.6	10.1	**7.9**	2.6	**6.5**	5.5	1.4	1.0	**5.2**	1.8	.3	1.5	**9.0**
North Carolina	15,708	.03	12.5	9.4	.4	1.7	8.1	2.0	1.2	1.4	11.3	3.3	7.1	4.5	10.4	1.5	2.8	1.6	.7	1.0	3.4	**15.6**
North Dakota	4,086	.02	13.2	6.4	.8	**5.7**	**13.6**	3.1	.2	1.1	14.6	5.4	6.0	4.7	6.0	1.8	1.1	**5.8**	2.0	1.2	3.6	3.7
Ohio	19,562	.5	14.4	7.8	.5	4.1	8.1	3.7	1.0	**4.3**	9.4	4.9	5.2	**7.4**	8.7	**2.2**	2.9	2.3	**2.7**	1.1	2.4	6.5
Oklahoma	9,706	.6	14.2	7.0	.6	4.5	12.8	3.0	1.6	.9	10.5	**7.7**	5.8	4.8	8.0	1.5	**4.7**	1.0	.6	.9	2.2	**7.2**
Oregon	3,842	.2	12.1	8.7	.6	**9.8**	6.4	4.1	.8	1.4	15.2	4.6	2.7	4.4	8.0	1.6	2.0	**4.0**	**2.7**	1.0	2.8	**6.9**
Pennsylvania	29,574	.4	12.5	7.6	.4	**6.9**	11.4	3.6	.9	1.0	14.2	6.2	4.6	5.6	6.8	**2.5**	1.0	**4.1**	**3.0**	.6	1.9	4.8
Rhode Island	2,853	.9	7.5	**15.2**	.4	5.6	**13.4**	**6.8**	.4	.7	10.0	5.4	3.5	4.2	7.9	1.5	1.9	**4.9**	.5	.9	3.0	5.2
South Carolina	9,023	.1	12.2	**11.6**	.5	2.2	7.4	2.6	1.0	.7	9.7	3.4	5.6	4.7	5.8	1.2	.8	1.7	.7	.6	3.3	**24.1**
South Dakota	1,488	.2	**18.3**	1.5	.7	2.0	10.2	**7.7**	.7	1.0	12.8	8.1	3.8	4.5	7.4	3.0	.3	**6.5**	**3.5**	.3	.9	6.7
Tennessee	13,310	.3	13.5	10.7	.7	2.4	9.0	5.3	1.0	1.0	11.0	5.2	**7.8**	4.7	9.2	1.5	**4.9**	1.9	1.0	1.1	2.8	5.0
Texas	21,114	.2	14.1	10.6	.8	4.1	**15.3**	2.0	1.3	1.0	11.3	7.0	4.6	5.0	10.3	1.6	2.2	1.7	.3	.9	3.2	2.4
Utah	2,614	.4	14.0	7.8	.5	4.9	9.6	4.5	.5	1.3	**21.7**	4.9	2.8	4.2	4.9	.9	1.1	4.4	2.2	1.4	3.7	4.3
Vermont	966	.1	11.0	3.7	.5	2.4	11.3	**8.3**	1.0	**3.4**	11.0	**8.5**	3.3	**8.6**	2.1	**3.3**	2.6	**5.8**	1.9	.....	3.3	8.1
Virginia	11,624	.1	14.0	6.2	.3	2.5	10.6	3.5	1.8	1.3	**16.6**	5.8	**7.5**	5.2	8.8	**3.0**	1.1	3.1	**2.8**	1.0	2.4	2.4
Washington	4,983	.3	13.1	7.6	.6	5.5	8.7	**5.4**	.4	1.0	**21.4**	4.4	2.9	4.0	7.7	1.1	.4	3.3	**3.2**	**1.2**	2.8	5.0
West Virginia	9,082	.2	**16.6**	5.6	.4	4.2	11.5	2.5	1.3	1.1	13.0	7.1	6.0	4.7	6.8	**3.0**	**4.5**	2.5	**3.6**	.8	2.2	2.3
Wisconsin	14,893	.2	11.8	7.5	.6	5.0	10.1	2.7	.7	**2.0**	14.1	6.5	5.2	5.3	8.4	1.4	2.9	3.0	**4.6**	**1.2**	**5.1**	1.8
Wyoming	1,132	.8	12.0	6.4	.4	4.7	7.7	5.2	1.7	1.0	11.0	8.7	3.1	4.2	6.1	1.2	**4.6**	3.3	1.8	.7	**4.0**	**11.5**
State not specified	726	.1	14.3	**14.5**	.7	3.0	11.8	1.5	.4	1.0	12.1	2.6	5.5	4.1	9.8	1.9	**7.0**	.8	1.5	**1.9**	**4.0**	1.2

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Specific causes of rejection.—In order to present the causes for rejection the records of 467,694 registrants were examined and compilations made of the causes of rejection under 22 general titles. The results are given in the following table:

Varieties of defects disqualifying for military service, from Feb. 10 to Oct. 15, 1918.

	Cause for rejection.	Total rejections by local boards and camp surgeons.		Rejected by local boards and placed in Group D (Series X).		Accepted by local boards for Groups A or C, but rejected by camp surgeons (Series X).		Discharged from Army after acceptance by local boards and camp surgeons (Series X).	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1	Total for all causes	467,694	100.00	255,312	100.00	172,000	100.00	40,382	100.00
2	Alcohol and drugs	2,007	.43	231	.09	1,288	.72	538	1.33
3	Bones and joints	57,744	12.35	36,283	19.04	19,623	11.41	4,838	11.98
4	Developmental defects (height, weight, chest measurements, muscles)	39,168	8.37	27,288	10.69	11,838	6.72	288	.71
5	Digestive system	2,476	.53	1,586	.62	448	.26	442	1.09
6	Ears	20,465	4.38	12,100	4.74	6,455	3.75	1,910	4.73
7	Eyes	49,801	10.65	32,775	12.83	15,367	8.93	1,659	4.11
8	Flat foot (pathological)	18,087	3.87	3,342	1.31	13,234	7.69	1,511	3.74
9	Genito-urinary (venereal)	6,235	1.33	2,042	.81	2,744	1.60	1,449	3.59
10	Genito-urinary (nonvenereal)	6,309	1.35	3,054	1.21	2,226	1.30	1,029	2.55
11	Heart and blood vessels	61,142	13.07	36,470	14.28	19,268	11.20	5,404	13.38
12	Hernia	28,268	6.04	8,423	3.32	18,353	10.67	1,442	3.57
13	Mental deficiency	24,514	5.24	14,417	5.65	6,293	3.66	3,804	9.42
14	Nervous and mental disorders	23,728	5.07	10,905	4.29	7,319	4.26	5,504	13.63
15	Respiratory (tuberculous)	40,523	8.67	27,569	10.77	10,792	6.27	2,162	5.35
16	Respiratory (nontuberculous)	7,823	1.67	3,081	1.21	3,483	2.02	1,259	3.12
17	Skin	12,319	2.63	12,297	4.78	214	.12	98	.24
18	Teeth	14,783	3.16	4,314	1.69	9,552	5.79	527	1.31
19	Thyroid	8,215	1.76	3,151	1.23	3,697	2.15	1,367	3.38
20	Tuberculosis of parts other than respiratory	4,136	.88	3,853	1.51	159	.09	124	.31
21	All other defects	14,314	3.06	12,671	4.96	1,373	.80	270	.67
22	Cause not given	25,419	5.44	2,465	.97	18,265	10.60	4,689	11.61

The results of these findings are also arranged according to causes and States. The percentages of rejection are given in the table on pages 630 and 631, those 25 per cent or more above the rate for the United States as a whole being indicated in heavy-face type.

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From the report as published it is interesting to note that out of 3,208,446 registrants physically examined by the local boards during the period December 15, 1917, to September 11, 1918, 70.41 per cent were found fully qualified (Group A) for all military duty. These men were reexamined by the camp surgeons for induction into military service and an average of 8.1 per cent of them were rejected. These physical examinations and reexaminations therefore revealed the fact that only 64.71 per cent of the registrants in the age group 21–31 were fully qualified for all military duty. It is further noted in the report that there were rejected (Group D) in—

	Per cent.
Urban regions	21.68
Rural regions	16.89
Total colored	17.32
Total white	16.08
Alien communities	17.14
Native communities	13.64

This would appear to indicate that the rural registrants were in better physical condition than the urban, the white better than the colored, and the native born better than the foreign born. But this conclusion may not be altogether justified by the final figures, for in the tables as given for colored and white comparisons the figures show that 74.6 per cent of the colored were in Class A, whereas only 69.71 of the whites were in that group. The tables of comparisons between the urban and rural regions and between native and foreign born do not give the percentages found in Group A, and it may be that if these percentages were given the conclusions indicated in the report might be different.

Undoubtedly the physical examinations of so many men in this age group taken evenly from all sections of the country constitute a fair index of the health of the general population. This is especially true since the local board examinations were checked up by the examinations of the camp surgeons. In considering these findings and before applying the ratios to the general population the age of the registrants examined must not be forgotten. Physical unfitness undoubtedly increases with age. The report gives an important clue as to the increasing ratio of physical unfitness in the table comparing the men in the age 21 group with those in the age 21–30 group. Those in the younger age group gave 76.89 per cent physically fit for all military duty (Group A) as compared with 69.17 per cent given by the older age group, and only 9.93 per cent of the younger men were found in Group D as compared with 17.47 per cent of the older age group.

Making due allowances for all possibilities of error and all differences according to age, sex, and sections of the country, when the results of the findings of the Provost Marshal General are applied to

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the country as a whole we are forced to the conclusion that the health of the country is far below what it ought to be. This is especially true when one considers and weighs the fact that only 65 per cent of our young men are found physically fit for military duty by physical examinations by draft board and camp surgeons and over 21 per cent physically disqualified for any kind of military service, even of the limited or unlimited class. These conditions are not confined to any one section of the country. There is no great difference in the ratios for the North, South, East, or West, urban or rural, native or foreign born. In fact, some of our previously formed conclusions, generally accepted as facts, as to the healthfulness of the several sections of the United States may have to be revised somewhat. Thus we face the striking fact that when the rejections made by the camp surgeons are included less than 52 per cent of the registrants in the State of Washington are in Group A as compared with over 73 per cent in Group A for the State of Arkansas, and this despite the fact that Washington enjoys the lowest death rate of any State in the Union. Again, taking some of the findings from New England, usually considered one of the most healthful sections of the country, we observe that in Massachusetts less than 53 per cent of the registrants are in Group A, in Vermont less than 52 per cent, and in Maine less than 62 per cent, whereas the southern section of the United States shows that Oklahoma furnished over 77 per cent in Group A, Arkansas over 73 per cent, and Alabama over 66 per cent.

The figures from all sections of the country are sufficiently appalling to show that it is of the greatest importance for the whole Nation to realize that it is high time to search out the causes of this physical unfitness and find the proper remedies. It is the supreme duty of all agencies, national, State, and local, to work together to these ends.

EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

A slight reduction in the number of cases of influenza in the United States is indicated by telegraphic reports from State health officers and from officers of the Public Health Service in charge of civil zones around army camps. (See pp. 642 and 647.)

The number of cases reported is not large. For the week ended March 22, 1919, slight increases in the number of cases were reported from Arkansas, California, Connecticut, Kansas, Louisiana, Maine, Oregon, Vermont and Washington. Decreases were reported from Alabama, Georgia, Illinois, Iowa, New Jersey, North Carolina, Ohio, and Virginia.

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DEATHS DURING WEEK ENDED MARCH 15, 1919, IN CITIES.

The following table shows the registered deaths from all causes, and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended March 15, 1919. The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown.

The data are taken from the "Weekly Health Index," March 18, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended Mar. 15, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	47	21.8	C 23.6	12	5.6
Atlanta, Ga.	201,732	71	18.4	C 15.5	.....	.....
Baltimore, Md.	[2] 669,981	251	19.5	A 22.5	61	4.7
Birmingham, Ala.	197,670	61	16.1	A 17.9	.....	.....
Boston, Mass.	785,245	275	18.3	A 18.9	45	3.0
Buffalo, N. Y.	473,229	158	17.4	C 14.8	23	2.5
Cambridge, Mass.	111,432	24	11.2	A 16.4	4	1.9
Chicago, Ill.	2,596,681	917	18.4	A 17.5	232	4.7
Cincinnati, Ohio	418,022	218	27.2	C 20.3	101	12.6
Cleveland, Ohio.	810,306	318	20.5	C 12.8	132	8.5
Columbus, Ohio.	225,296	120	27.8	C 15.3	60	13.9
Dayton, Ohio.	130,656	38	15.2	C 15.2	.....	.....
Denver, Colo.	.....	104	.....	.....	.....	.....
Fall River, Mass.	128,392	43	17.5	C 17.9	14	5.7
Grand Rapids, Mich.	135,450	44	16.9	C 11.9	.....	.....
Indianapolis, Ind.	299,577	133	23.9	C 14.2	.....	.....
Jersey City, N. J.	318,770	132	21.6	C 19.6	.....	.....
Kansas City, Mo.	313,785	118	19.6	C 16.6	43	7.1
Los Angeles, Calif.	568,495	158	14.5	A 14.9	13	1.2
Louisville, Ky.	242,707	206	44.3	C 23.8	112	24.1
Lowell, Mass.	109,081	32	15.3	A 20.8	5	2.4
Memphis, Tenn.	154,759	75	25.3	C 23.2	14	4.7
Milwaukee, Wis.	453,481	131	15.1	A 15.0	.....	.....
Minneapolis, Minn.	383,442	122	16.6	C 11.0	.....	.....
Nashville, Tenn.	119,215	52	22.7	C 21.0	11	4.8
Newark, N. J.	428,684	134	16.3	C 15.7	45	5.5
New Haven, Conn.	154,865	46	15.5	C 21.2	.....	.....
New Orleans, La.	382,273	150	20.5	A 20.2	30	4.1
New York, N. Y.	5,215,879	1,954	19.5	C 19.4	695	6.9
Oakland, Calif.	214,206	63	15.3	A 12.3	.....	.....
Omaha, Nebr.	180,264	45	13.0	C 9.3	.....	.....
Philadelphia, Pa.	1,761,371	642	19.0	[3] 19.4	164	4.9
Pittsburgh, Pa.	593,303	240	21.1	C 17.2	118	10.4
Portland, Oreg.	.....	59	.....	.....	9	.....
Providence, R. I.	263,613	76	15.0	C 15.8	22	4.4
Richmond, Va.	160,719	49	15.9	C 21.4	10	3.2
Rochester, N. Y.	264,856	91	17.9	C 14.8	15	3.0
St. Louis, Mo.	779,951	319	21.3	C 17.7	119	8.0
St. Paul, Minn.	257,699	58	11.7	C 10.7	.....	.....
San Francisco, Calif.	478,530	154	16.8	C 17.1	17	1.9
Seattle, Wash.	.....	71	.....	.....	8	.....
Spokane, Wash.	.....	36	.....	.....	.....	.....
Syracuse, N. Y.	161,404	45	14.5	C 17.1	9	2.9
Toledo, Ohio.	262,234	72	14.3	A 16.4	28	5.6
Washington, D. C.	401,681	140	18.2	A 19.4	34	4.4
Worcester, Mass.	173,650	60	18.0	C 16.5	.....	.....

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED MAR. 22.

CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	Cases.
Diphtheria	1
Influenza	10
Mumps	2

CAMP DEVENS ZONE, MASS.

Erysipelas:	
Lancaster	1
Measles:	
Lunenburg	6
Mumps:	
Lancaster	1
Scarlet fever:	
Lancaster	1
Tuberculosis:	
Lunenburg	1
Tuberculosis, pulmonary:	
Ayer	1
Shirley	1
Whooping cough:	
Lancaster	3

CAMP DIX ZONE, N. J.

Diphtheria:	
Springfield Township	1
Measles:	
New Hanover Township	5
North Hanover Township	1

CAMP DODGE ZONE, IOWA.

Des Moines:	
Chicken pox	1
Diphtheria	1
Gonorrhea	2
Measles	3
Scarlet fever	12
Smallpox	3
Syphilis	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chicken pox	1
Diphtheria	1
Measles	25
Mumps	2
Pneumonia, broncho	2
Pneumonia, lobar	1
Smallpox	2

CAMP FUNSTON ZONE, KANS

Diphtheria:	Cases.
Junction City	1
German measles:	
Junction City	1
Influenza:	
Junction City	3
Manhattan	6
Stockdale	1
Mumps:	
Junction City	1
Manhattan	4
Pneumonia:	
Manhattan	1
Pneumonia, broncho:	
Junction City	2
Scarlet fever:	
Junction City	1
Manhattan	6
Army City	1

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Columbus:	
Influenza	3
Gonorrhea	9
Measles	7
Pellagra	1
Pneumonia	2
Scarlet fever	1
Smallpox	4
Syphilis	2
Muscogee County:	
Influenza	1
Pellagra	1
Smallpox	1
Tuberculosis	1

CAMP GORDON ZONE, GA

Atlanta	
Chancroid	4
Chicken pox	20
Diphtheria	4
Gonorrhea	10
Influenza	10
Malaria	1
Measles	25
Mumps	10

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CAMP GORDON ZONE, GA.—continued.

Atlanta—Continued.	Cases.
Pneumonia	2
Scarlet fever	7
Septic sore throat	2
Smallpox	48
Syphilis	43
Tuberculosis	4

GULFPORT SANITARY DISTRICT, MISS.

Chicken pox:	
De Lisle	1
Gulfport	1
Lyman	1
Diphtheria:	
Biloxi	1
Gonorrhea:	
Biloxi	1
Moss Point	2
Pascagoula	3
Vancleave	1
Influenza:	
Biloxi	2
Escatawpa	1
Gulfport	1
Moss Point	2
Ocean Springs	2
Malaria:	
Ansley	1
Caesar	2
De Lisle	3
Escatawpa	1
Kiln	1
Kreole	1
Moss Point	4
Pascagoula	4
Pass Christian	1
Wiebe	2
Measles:	
Biloxi	1
Lyman	4
Pascagoula	1
Mumps:	
Biloxi	6
Gulfport	2
Lyman	1
Mississippi City	19
Moss Point	3
Syphilis:	
Moss Point	1
Tuberculosis:	
Gulfport	1
Whooping cough:	
Gulfport	2
Moss Point	1
Pass Christian	1

CAMP A. A. HUMPHREYS ZONE, VA.

Alexandria:	
Chicken pox	2
Gonorrhea	2
Influenza	8
Mumps	1
Pneumonia	1
Tonsilitis	9
Tuberculosis	1
Typhoid fever	2

CAMP A. A. HUMPHREYS ZONE, VA.—continued.

Fairfax County:	Cases.
Mumps	1
Fredericksburg:	
Influenza	6
Mumps	3
Syphilis	1
Whooping cough	2

CAMP JACKSON ZONE, S. C.

Columbia:	
Diphtheria	2
Influenza	1
Measles	1
Mumps	3
Tuberculosis	2
Whooping cough	10
Government clinic:	
Chancroid	1
Gonorrhea	5
Syphilis	25

CAMP LEE ZONE, VA.

Petersburg:	
Diphtheria	1
Gonorrhea	3
Influenza	4
Measles	3
Scarlet fever	1
Syphilis	6
Tuberculosis	1

CAMP LEWIS ZONE, WASH.

Measles:	
Lake City	2
Mumps:	
American Lake	3
Lake City	2
Pneumonia:	
Lake City	1

CAMP MERRITT ZONE, N. J.

Cerebrospinal meningitis:	
Fairview	1
Chicken pox:	
Englewood	1
Influenza:	
Englewood	5
Haworth	1
Tenafly	9
Measles:	
Haworth	1
Mumps:	
Englewood	3
Pneumonia:	
Englewood	3
Edgewater	1
Scarlet fever:	
Englewood	1

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Colbert County:	
Erysipelas	1
Mumps	1
Smallpox	1
Tonsilitis	2
Tuberculosis	2

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[illegible]	8
[illegible]	3
[illegible]	1
[illegible]	4
[illegible]	3
Tuberculosis	1

CAMP PIKE ZONE, ARK.

Little Rock:	
Chancroid	3
Chicken pox	3
Erysipelas	2
Gonorrhea	11
Influenza	4
Malaria	1
Measles	1
Mumps	15
Pneumonia	7
Scarlet fever	4
Smallpox	3
Syphilis	21
Tonsilitis	2
Tuberculosis	1
Typhoid fever	1
North Little Rock:	
Chicken pox	2
Gonorrhea	3
Mumps	4
Pneumonia	1

CAMP POLK ZONE, N. C.

Chicken pox:	
Durham	6
Durham Township	2
Raleigh	7
Raleigh Township	3
Diphtheria:	
Middle Creek Township	1
Measles:	
Durham	3
Durham Township	2
Raleigh	1
St. Matthews Township	1
Mumps:	
Durham	5
Lew Light Township	1
Raleigh Township	1
Pneumonia:	
House Creek Township	1
Diphtheria:	
Norfolk	1
Influenza:	
Norfolk	15
Lethargic encephalitis:	
Norfolk County	1
Measles:	
Portsmouth	5
Norfolk	4
Norfolk County	2
Scarlet fever:	
Norfolk	6
Smallpox:	
Portsmouth	1
Norfolk	8
Norfolk County	4
Tuberculosis:	
Portsmouth	1

CAMP SHERIDAN ZONE, ALA.

Government clinic:	
Chancroid	2
Gonorrhea	7
Syphilis	16

CAMP SHERMAN ZONE, OHIO.

Gonorrhea:	
Government clinic	7
Influenza:	
Chillicothe	4
Ross County	20
Pneumonia:	
Ross County	5
Syphilis:	
Government clinic	2

SOUTHER FIELD ZONE, GA.

Lethargic encephalitis	1
Rabies in animal	1

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Chicken pox:	
Louisville	1
Diphtheria:	
Jefferson County	2
Gonorrhea:	
Government clinic	18
County jail	6
Jefferson County	1
Louisville	1

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CAMP ZACHARY TAYLOR ZONE, KY. AND IND.—con.

	Cases.
Influenza:	
Clark County	21
Jefferson County	69
Louisville	180
New Albany	6
Measles:	
Jefferson County	3
Louisville	17
Pneumonia, lobar:	
Jefferson County	1
Louisville	9
Rabies in animal:	
Jefferson County	1
Scarlet fever:	
Jefferson County	10
Louisville	5
Smallpox:	
Jefferson County	4
Syphilis:	
County jail	4
Government clinic	28
Louisville	1
Tuberculosis, pulmonary:	
Jefferson County	2
Louisville	5
Typhoid fever:	
New Albany	3

TIDEWATER HEALTH DISTRICT, VA.

Chancroid:	
Government clinic	1
Newport News	1
Chicken pox:	
Riverview	1
Newport News	2
Diphtheria:	
Newport News	2
German measles:	
Newport News	3
Gonorrhea:	
Government clinic	25
Newport News	3
Measles:	
Newport News	1
Meningitis, tubercular:	
Newport News	1
Mumps:	
Newport News	8
Pneumonia:	
Newport News	1

TIDEWATER HEALTH DISTRICT, VA.—contd.

Scarlet fever:	
Hampton	2
Riverview	2
Smallpox:	
Newport News	1
Syphilis:	
Government clinic	2
Newport News	1
Tuberculosis:	
Newport News	1
Venereal:	
Government clinic	2
Whooping cough:	
Newport News	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chancroid	1
Chicken pox	1
Diphtheria	2
Gonorrhea	15
Influenza	4
Mumps	2
Scarlet fever	2
Smallpox	2
Syphilis	5
Tuberculosis	1

CAMP UPTON ZONE, N. Y.

Chicken pox:	
Riverhead	1
Diphtheria:	
Brook Haven	1
German measles:	
Riverhead	2
Measles:	
Patchogue	1
Pneumonia:	
Patchogue	2
Riverhead	2
Septic sore throat:	
Brook Haven	3

WILMINGTON SANITARY DISTRICT, N. C.

Wilmington:	
Lethargic encephalitis	2
Measles	1
Meningitis, tubercular	1
Pneumonia	1
Scarlet fever	1
Typhoid fever	2

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended March 14, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

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	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	1,138.36	1,163.11
All troops in United States	1,202.44	1,238.64
American Expeditionary Forces	1,062.12	1,088.42
Annual admission rate per 1,000 (disease only)	924.76	1,000.00
All troops in United States	1,084.57	1,076.00
American Expeditionary Forces	886.02	1,024.00
Noneffective rate per 1,000 on day of report	53.56	54.00
All troops in United States[1]	62.63	64.00
American Expeditionary Forces	50.39	52.00
Annual death rate per 1,000 (all causes)	13.81	15.00
All troops in United States[1]	9.71	11.00
American Expeditionary Forces	15.21	15.00
Annual death rate per 1,000 (disease only)	11.86	13.00
All troops in United States[1] (disease only)	9.22	11.00
American Expeditionary Forces	12.76	13.00

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

Cases of special diseases reported during the week ended Mar. 14, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
Beauregard	1			20						1,688.12	84.00
Bowie	7			19	8	9	3			2,019.44	104.00
Bragg										416.00	20.00
Fremont				1						857.39	38.00
Greene	1			2						555.42	28.00
Hancock				18	2					715.44	34.00
Kearny	1			9	5					892.56	42.00
Logan	1									604.34	
MacArthur				5						1,075.62	54.00
McClellan				6	3					807.36	38.00
Sevier				10	2	2				995.36	44.00
Shelby	2			17	8	1				2,434.52	114.00
Sheridan				1	1					222.24	10.00
Wadsworth				15	12					1,577.72	74.00
Wheeler							1			88.16	4.00
Custer	4			13	12				2	1,279.62	60.00
Devens	9			13		5				1,915.36	90.00
Dix	3	1		28	15		2	1		521.46	24.00
Dodge	5			14	9	4	1	1	6	117.35	6.00
Eustis				2		1	1			1,050.68	48.00
Funston	2			14		2	2		2	964.12	44.00
Gordon	2		1	53		10				2,558.36	120.00
Grant	9			3		12	3			1,188.14	56.00
Humphreys	2			15		1	1		2	698.15	32.00
Jackson	2		2	48			2	1		985.20	46.00
J. E. Johnston											
Henry Knox	12			1				1	1	1,460.68	70.00
Las Casas				1						854.40	40.00
Lee	7			5	3				1	1,130.48	52.00
Lewis	9			19	3	2	1		4	1,232.58	58.00
Meade	6			17	6		1			800.37	38.00
Pike	4		1	26	1				1	1,231.58	58.00
Sherman	3			8		9	2	1	2	1,412.66	66.00
Taylor	9			12	5	21	4	4	4	1,004.46	46.00
Travis	7			29		11	2	1		1,731.80	80.00
Upton	16			29	6	9				954.42	44.00
Northeastern Department			1	5		3				1,000.50	50.00
Eastern Department	5			27	4	22			2	768.72	36.00
Southeastern Department				15	8	3				1,168.60	56.00
Central Department				2		2			3	1,200.56	56.00
Southern Department	7			84	5	60	1		2	870.46	40.00
Western Department				11	4	7				512.26	24.00
Aviation camps	2		1	36		20	1			900.40	42.00
Port of embarkation:											
Hoboken	15			13	13	105	6		1	1,794.84	84.00
Newport News	9			73	10	10	6	4	5	3,002.40	140.00
Akatrat Disciplinary Barracks				1						900.42	42.00

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Cases of special diseases reported during the week ended Mar. 14, 1919—Continued.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
				Total.	New infections.						
Leavenworth Disciplinary Barracks	2								1	1,394.54	42.95
Columbus Barracks				2					1	1,352.11	55.25
Jefferson Barracks	6			1	1	4				4,788.08	142.13
Fort Logan										1,048.38	34.27
Fort McDowell				8						965.94	32.50
Fort Sill	2			7	7	2	4			850.68	40.56
Fort Slocum				1						183.09	32.86
Fort Thomas										1,004.83	58.14
West Point										926.50	20.60
Arsenals				14	4	1			1	486.18	28.35
Miscellaneous small stations	2			11		3	1			714.47	29.89
Total	174	1	6	754	157	342	45	14	41	1,094.57	62.93

Number of deaths and annual rates per 1,000 at large camps in United States, week ended Mar. 14, 1919.

Camp.	Strength.	Deaths.		Annual death rate per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Beauregard	2,892				
Bowie	5,245	1	1	9.89	9.89
Bragg	625				
Fremont	1,265				
Grayson	1,591				
Hancock	4,867	2	2	21.36	21.36
Kearny	3,594	4	4	57.87	57.87
Logan	1,671				
MacArthur	2,358				
McClellan	1,113				
Sevier	2,699	1	1	19.26	19.26
Shelby	5,314				
Sheridan	1,207				
Wadsworth	2,941	1	1	17.68	17.68
Wheeler	1,157				
Custer	7,684	1	1	6.76	6.76
Devens	9,014	2	2	11.53	11.53
Dix	15,948	3	3	9.78	9.78
Dodge	10,894	1	1	4.77	4.77
Eustis	5,200	1	1	10.00	10.00
Funston	8,252	1	1	6.30	6.30
Gordon	8,598				
Grant	14,001				
Humphreys	9,711	1	1	5.64	5.64
Jackson	10,112	1	1	5.14	5.14
J. E. Johnston	777				
Henry Knox	2,145	3	3	72.72	72.72
Las Casas	850				
Lee	13,495	2	2	7.70	7.70
Lewis	9,196				
Meade	10,336	1	1	5.00	5.00
Pike	8,375	3	3	18.62	18.62
Sherman	11,711	1	1	4.44	4.44
Taylor	14,719	4	4	14.14	14.14
Travis	8,768	2	2	11.86	11.86
Upton	21,817	7	7	16.68	16.68
Northeastern Department	4,910				
Eastern Department	26,989	2	2	3.85	3.85
Southeastern Department	5,265				
Central Department	6,299				
Southern Department	39,118	4	4	5.31	5.31
Western Department	11,783	1	1	4.41	4.41
Aviation camps	35,173	1		1.47	
Port of embarkation:					
Hoboken	45,428	5	4	5.72	4.57
Newport News	23,443	3	3	6.65	6.65
All others	92,681	40	38	22.44	21.32
Total	529,775	99	94	9.71	9.22

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Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	17.07	18.18	44.94	68.67
Dysentery	.09	.28	.20	1.28
Malaria	.58	1.34	.03	.12
Venereal	74.00	64.36	66.03	54.05
Paratyphoid			.10	.28
Typhoid	.19	.43	1.41	1.15
Measles	4.41	6.06	2.21	2.18
Meningitis	1.37	.96	2.72	3.01
Scarlet fever	4.02	5.19	1.20	1.04
Influenza	33.56	37.42		

RECIPROCAL NOTIFICATION.

Minnesota.

Cases of communicable diseases referred during February, 1919, to other State health departments by Department of Health of the State of Minnesota.

Disease and locality of notification.	Referred to health authority of—	Why referred.
Diphtheria:		
Minneapolis health department, Hennepin County.	New York City, New York County, N. Y.	Left quarantined home in Minneapolis and went to New York.
Scarlet fever:		
Minneapolis health department, Hennepin County.	Fargo, Cass County, N. Dak.	2 Minneapolis girls exposed to scarlet fever went to North Dakota.
Austin, Mower County	Patch Grove, Grant County, Wis.	Broke quarantine and went to his home in Wisconsin.
Smallpox:		
Fergus Falls, Ottertail County.	Academy, Charles Mix County, S. Dak.	Father and 4 of family visited us in South Dakota, from whom they all contracted smallpox.
Minneapolis health department, Hennepin County.	Elrod, Clark County, S. Dak.	Man and wife possibly contracted smallpox in South Dakota and then came to Minnesota.
Tuberculosis:		
Mayo Clinic, Rochester, Olmsted County.	Chicago, Cook County, Ill.; South Bend, St. Joseph County, Ind.; Coin, Page County, Iowa; Butte, Silver Bow County, Mont.; Pittsburgh, Allegheny County, Pa.; Ellsworth, Washington County, Pa.; Letcher, Sanborn County, S. Dak.; Baraboo, Sauk County, Wis.; Saxon, Iron County, Wis.; Gladstone, Manitoba, Canada; Rossburn, Manitoba, Canada.	1 incipient, 1 apparently arrested, 3 advanced, and 6 moderately advanced cases left Mayo Clinic for homes.
Pokegama Sanatorium, Pine County.	Lorimore, Grand Forks County, N. Dak.	Open case; left sanatorium for home.
Buena Vista Sanatorium, Wabasha County.	Havre, Hill County, Mont.	1 open case; left sanatorium for home.
	Cavalier, Pembina County, N. Dak.	1 fatal case removed to home.

CURRENT STATE SUMMARIES.

Telegraphic Reports for the Week Ended March 22, 1919.

Alabama.— State totals: Typhoid fever 6, smallpox 19, measles 64, scarlet fever 7, diphtheria 14, cerebrospinal meningitis 6, influenza 41.

Arkansas.—State totals: Influenza 54, malaria 29, smallpox 20, whooping cough 18, tuberculosis 11, chicken pox 10, measles 8,

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typhoid fever 4, diphtheria 3, pellagra 3, trachoma 3, scarlet fever 3, ophthalmia 1.

California.—Influenza: Cases reported 570. Smallpox: Los Angeles city 8, San Francisco 7, Marysville 3, Fresno County 3, El Centro 2, Humboldt County 1. Typhoid fever: Los Angeles city 2, one each in Napa County, San Francisco, San Leandro, Oakland, and Antioch. Cerebrospinal meningitis: San Francisco 2, Naval Training Station 1, Los Angeles city 1.

Connecticut.—State totals: Cerebrospinal meningitis 1, smallpox 1. Influenza, total for State, 233 cases.

Florida.—State totals: Typhoid 11, epidemic meningitis 1.

Georgia.—State totals: Acute infectious conjunctivitis 1, cerebrospinal meningitis 1, chicken pox 24, diphtheria 6, dysentery (amebic) 1, dysentery (bacillary) 1, German measles 8, gonorrhea 67, influenza 115, malaria 7, measles 44, mumps 39, pneumonia (acute lobar) 23, rabies 1, scarlet fever 7, septic sore throat 7, smallpox 50, syphilis 34, trachoma 1, tuberculosis (pulmonary) 16, tuberculosis (other than pulmonary) 1, whooping cough 12.

Illinois.—State totals: Diphtheria 141; of which in Chicago 113. Scarlet fever 124; of which in Chicago 60, Quincy 7, Oglesby 7. Smallpox 70, of which in Pekin 12, Canton 8, Chicago 8, Alton 7, Peoria 7. Meningitis: Chicago, 4. Poliomyelitis: Dalzel 1, Springfield 1. Gonorrhea 141, syphilis 79, influenza 1,168; of which in Chicago 324. Lethargic encephalitis 20; of which Chicago 13, Middletown 2, one each in Quincy, Cairo, Kansas, Bowling Township (Rock Island County), Dorchester Township (Macoupin County). Recrudescence of influenza noted in the following Illinois communities: Ashland 22, Pana 23, Eagle Creek Township (Gallatin County) 97, Sunbury Township (Livingston County) 27, Easton 18, Forest City 23, Prairie City 39, Mount Hope Township (McLean County) 30, Cisco 22, Strasburg 26, Hoopeston 16.

Indiana.—Scarlet fever: Columbia City, South Bend, South Whitley. Smallpox: Anderson, Goshen, Elkhart, South Bend. Diphtheria: Kosciusko County 1, Tippecanoe County 2, Miami County 2, Delaware County 1, Howard County 2, Fort Wayne (Allen County) several. Syphilis: Cases reported 18. Gonorrhea: Cases reported 48. One death rabies (human) Vigo County.

Iowa.—Chancroid: Davenport 1. Diphtheria: Boone 1, Dubuque 1, Mason City 1. Gonorrhea: Charles City 1, Council Bluffs 6, Davenport 5, Des Moines 9, Dubuque 1, Hawarden 1, Maquoketa 2, Marshalltown 1, Mason City 2, Muscatine 1, Oskaloosa 1, Sioux City 6, Strawberry Point 1. Measles: Council Bluffs 2. Scarlet fever: Albion 1, Burlington 3, Cedar Rapids 1, Council Bluffs 1, Des Moines 9, Dubuque 1, Mason City 1, Newton 1, Prairie City 1, Seymour 1, Sibley 1. Smallpox: Boone 5, Burlington 1, Cedar Rapids 8, Council

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Bluffs 3, Davenport 3, Des Moines 2, Dubuque 1, Mason City 1, Ottumwa 6, Strawberry Point 1. Syphilis: Des Moines 8, Dubuque 1, Greene 1, Iowa City 1, Oskaloosa 1, Sioux City 1. In rural districts of the following counties: Cerebrospinal meningitis: Jaspar 1. Diphtheria: Allamakee 4, Poweshiek 1, Wayne 1. Measles: Louisa 1. Scarlet fever: Des Moines 2, Kossuth 1, Madison 1, Marshall 1, Taylor 1, Warren 2, Washington 1. Smallpox: Allamakee 1, Carroll 5, Crawford 1, Jones 1, Lyon 1, Mills 1, Monona 1, Story 1. Influenza cases reported in State 121.

Kansas.—Meningitis: Soldier 1, Marion 1, Beattie 1, Kansas City 1. State totals: Smallpox 67, typhoid fever 1, diphtheria 19, scarlet fever 68, influenza 3,507.

Louisiana.—State totals: Influenza 67, smallpox 41, typhoid fever 6, scarlet fever 5, diphtheria 8, meningitis 2.

Maine.—Chancroid: Belfast 1. Chicken pox: Portland 3. Diphtheria: Bangor 1, Presque Isle 1, Augusta 1, Gardiner 1, South Portland 1. Gonorrhea: New Portland 1, Sanford 1, Augusta 1, Bath 1, Lewiston 4, Portland 21, Belfast 1, Waterville 2, Bangor 3, Dover 1. Mumps: Milo 1, Milbridge 5, Portland 3. Scarlet fever: Bath 1, Oldtown 2, Portland 5, Cumberland 1, Hallowell 1, Sherman 12. Smallpox: Hartland 1, Frenchville 5, Gueretto 10. Syphilis: Lewiston 1, Bangor 6, Portland 6, Calais 2, Augusta 2, Bar Harbor 1. Tuberculosis: 15 cases. Typhoid fever: Milo 1, Camden 1, Mapleton 1, Fairfield 1. Whooping cough: Baileyville 30, Portland 1. Influenza 181 cases.

Massachusetts.—Unusual prevalence: Measles, Fall River 61 diphtheria, Somerville 9; scarlet fever, Lowell 9.

Minnesota.—Smallpox (new foci): Becker County, Lake Park village 1; Clearwater County, Copely Township 3; Pine County, Pokegama Township 1; Polk County, Angus Township 1; Traverse County Wheaton village 2; Winona County, Rolling Stone Township 1. State totals: Cerebrospinal meningitis 2, syphilis 30, gonorrhea 71 chancroid 2.

New Jersey.—State totals: Influenza 720 cases reported and 21 cases pneumonia. Six cases smallpox reported in Hamilton Township (Atlantic County). No unusual prevalence of other diseases.

New York.—Outside of New York City. State totals: Typhoid fever 12, measles 227, scarlet fever 235, whooping cough 85, diphtheria 172. Smallpox: Olean 1, Rochester 1. Cerebrospinal meningitis: Rochester 1, Mexico 1, North Castle, 4. Pneumonia 208. Voluntary reports: Syphilis 193, gonorrhea 35.

North Carolina.—State totals: Whooping cough 111, measles 36, diphtheria 24, scarlet fever 9, septic sore throat 3, smallpox 54 chicken pox 45, infantile paralysis 1, typhoid fever 4, epidemic meningitis 3, broncho-pneumonia 54, lobar pneumonia 33, ophthalmia

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neonatorum 1, syphilis 39, gonorrhea 49, chancroid 6. Influenza cases reported by counties: Alamance 56, Cleveland 138, Cumberland 7, Davidson 23, city of Charlotte 20.

Ohio.—Smallpox: New foci in Fulton, Champaign, and Knox Counties with a slight increase in the number of cases throughout the State. Scarlet fever: Adams Township (Darke County) 8, Mantua Township (Portage County) 5. Influenza: Material increase during the past week.

Oregon.—Influenza: Portland 21 cases (6 deaths), Benton 10, Clackamas 4, Lane 4.

Vermont.—Eleven towns report 205 cases influenza. No other unusual prevalence.

Virginia.—Smallpox: Scott County 1, Lee 1, Montgomery 1, Norfolk 13. Lethargic encephalitis: Augusta County 1, Loudoun 1, Halifax 1, Dinwiddie 1, Norfolk 1, Franklin 1, Albemarle 4, Accomac 1, Amelia 1. Influenza: Cases reported 45.

Washington.—Wenatchee 1, Camas 2, Castlerock 1, Seattle 18, Puyallup 9, Tacoma 18, Pierce County 2, Spokane County 1, Walla Walla 1, Yakima County 16, Yakima city 17. Outbreak of influenza in Pend Oreille County (100 cases reported within last 10 days). Adams County, 29 cases influenza.

ANTHRAX.

City Report for Week Ended Mar. 8, 1919.

There were 2 deaths from anthrax reported in New York, N. Y., during the week ended March 8, 1919.

CEREBROSPINAL MENINGITIS.

State Reports for January and February, 1919.

Place.	New cases reported.
California (January):	
Alameda County—	
Oakland	1
Butte County—	
Gridley	1
Lassen County	1
Los Angeles County—	
Long Beach	1
Los Angeles	1
San Diego County—	
Camp Kearny	1
San Francisco	6
San Joaquin County	1
Santa Clara County	1
Palo Alto	1
Total	15
Connecticut (February):	
Fairfield County—	
New Canaan	1
New Haven County—	
New Haven	1
Waterbury	1
Total	3
Illinois (February):	
Clay County—	
Flora	2
Cook County—	
Chicago	10
Wilmette	1
McLean County—	
Normal township	1
St. Clair County—	
Fairmount City	1
Total	15
Louisiana (February):	
Avoyelles Parish	1
Caddo Parish	1
Grant Parish	1
La Salle Parish	1
Orleans Parish	1
Rapides Parish	1
St. Tammany Parish	1
Terrebonne Parish	1
Vermilion Parish	1
Washington Parish	1
Total	10

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CEREBROSPINAL MENINGITIS—Continued.

State Reports for January and February, 1919—Continued.

Place.	New cases reported.
Maine (February):	
Franklin County—	
Coplin (plantation)	1
Minnesota (February):	
Lake County—	
Two Harbors	1
St. Louis County—	
Duluth	1
Total	2
Mississippi (February):	
Bolivar County	1
Panola County	1
Union County	1
Total	3
New Jersey (February):	
Atlantic County	1
Burlington County	2
Essex County	6
Hudson County	5
Middlesex County	1
Union County	1
Total	16
North Carolina (February):	
Cumberland County	1
Davidson County	1
Durham County	1
New Hanover County	1
Pitt County	2
North Carolina (February)—Continued.	
Rowan County	1
Surry County	1
Total	8
Ohio (February):	
Athens County	1
Cuyahoga County	1
Gallia County	1
Hamilton County	2
Miami County	2
Summit County	1
Total	8
Oregon (February):	
Portland	3
Rhode Island (February):	
Providence	1
West Warwick (town)	1
Total	2
Washington (January):	
Pierce County—	
Tacoma	1
West Virginia (February):	
Fayette County	1
Jackson County	1
Kanawha County	1
Webster County	1
Wyoming County	2
Total	6

City Reports for Week Ended Mar. 8, 1919.

Place.	Cases.	Deaths.
Akron, Ohio	1	
Atlanta, Ga.	1	1
Baltimore, Md.	2	2
Birmingham, Ala.		1
Boston, Mass.	3	
Cairo, Ill.		1
Chicago, Ill.	1	
Columbia, S. C.	1	
Des Moines, Iowa	1	
Dubuque, Iowa	1	
Durham, N. C.	1	
Flint, Mich.		1
Jordan, Mo.	1	
Lancaster, Ohio		1
Lynn, Mass.	2	1
Milwaukee, Wis.	1	1
New Haven, Conn.	1	
New York, N. Y.	3	2
Norfolk, Va.	1	
Philadelphia, Pa.		1
Phillipsburg, N. J.	1	1
Piqua, Ohio		1
Portsmouth, Va.	1	
Racine, Wis.		1
St. Louis, Mo.	1	
San Antonio, Tex.	2	1
San Francisco, Calif.	2	2
Seattle, Wash.	1	
Tacoma, Wash.	1	
Washington, D. C.	1	
Wilmington, N. C.	1	

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.
Camp Gordon zone, Ga.	6
Camp Jackson zone, S. C.	1
Mobile Special Military district, Ala.	15
Camp Pike zone, Ark.	3
Camp Sheridan zone, Ala.	2
Tidewater health district, Va.	2
Camp Travis zone, Tex.	1

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DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.		Cases.
Charleston sanitary district, S. C.	1	Camp Polk zone, N. C.	1
Camp Dodge zone, Iowa	1	Portsmouth and Norfolk County health district, Va.	1
Fayetteville sanitary district, N. C.	1	Camp Zachary Taylor zone, Ky. and Ind.	2
Camp Funston zone, Kans.	1	Tidewater health district, Va.	2
Camp Gordon zone, Ga.	4	Camp Travis zone, Tex.	2
Gulfport health district, Miss.	1	Camp Upton zone, N. Y.	1
Camp Jackson zone, S. C.	2		
Camp Lee zone, Va.	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 661.

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	2	Picric acid plant zone, Ga	2
Gas and Flame School zone, Ga. and Ala.	9	Camp Pike zone, Ark.	14
Camp Gordon zone, Ga.	50	Camp Sheridan zone, Ala.	7
Gulfport health district, Miss.	7	Camp Sherman zone, Ohio	7
Camp A. A. Humphreys zone, Va.	2	Camp Zachary Taylor zone, Ky. and Ind.	26
Camp Jackson zone, S. C.	5	Tidewater health district, Va.	28
Camp Lee zone, Va.	2	Camp Travis zone, Tex.	15
Muscle Shoals sanitary district, Ala.	24		

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.		Cases.
Charleston sanitary district, S. C.	10	Muscle Shoals sanitary district, Ala.	5
Camp Funston zone, Kans.	10	Picric acid plant zone, Ga	2
Gas and Flame School zone, Ga. and Ala.	4	Camp Pike zone, Ark.	4
Camp Gordon zone, Ga.	18	Portsmouth and Norfolk County health district, Va.	15
Gulfport health district, Miss.	8	Camp Sherman zone, Ohio	24
Camp A. A. Humphreys zone, Va.	14	Camp Zachary Taylor zone, Ky. and Ind.	276
Camp Jackson zone, S. C.	1	Camp Travis zone, Tex.	4
Camp Lee zone, Va.	4		
Camp Merritt zone, N. J.	15		

LEPROSY.

City Reports for Week Ended Mar. 8, 1919.

During the week ended March 8, 1919, 1 case of leprosy was reported at New Orleans, La., and 1 at San Francisco, Cal.

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga.	1	Picric acid plant zone, Ga.	1
Gulfport health district, Miss.	20	Camp Pike zone, Ark.	1

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MALARIA—Continued.

State Reports for January and February, 1919.

Place.	New cases reported.
California (January):	
Glenn County	2
Los Angeles County	1
San Diego County	1
Total	4
Louisiana (February):	
Acadia Parish	4
Avoyelles Parish	1
Concordia Parish	1
De Soto Parish	3
Evangeline Parish	1
Rapides Parish	20
Total	30
Mississippi (February):	
Adams County	28
Alcorn County	47
Amite County	51
Attala County	28
Benton County	5
Bolivar County	184
Calhoun County	21
Carroll County	12
Chickasaw County	4
Choctaw County	9
Claiborne County	41
Clarke County	12
Clay County	4
Coahoma County	172
Copiah County	17
Covington County	40
De Soto County	15
Forrest County	11
Franklin County	50
George County	10
Greene County	2
Grenada County	14
Hancock County	28
Harrison County	18
Hinds County	114
Holmes County	141
Humphrey County	128
Issaquena County	29
Itawamba County	16
Jackson County	19
Jasper County	18
Jefferson County	30
Jefferson Davis County	11
Jones County	24
Kemper County	11
Lafayette County	18
Lamar County	30
Lauderdale County	32
Lawrence County	86

Place.	New cases reported.
Mississippi (February)—Continued.	
Leake County	8
Lee County	2
Leflore County	6
Lincoln County	2
Lowndes County	3
Madison County	3
Marion County	1
Marshall County	21
Monroe County	4
Montgomery County	2
Neshoba County	1
Newton County	1
Noxubee County	1
Oktibbeha County	2
Panola County	5
Pearl River County	5
Perry County	2
Pike County	2
Pontotoc County	6
Prentiss County	6
Quitman County	21
Rankin County	3
Scott County	1
Sharkey County	21
Simpson County	4
Smith County	12
Stone County	2
Sunflower County	1
Tallahatchie County	9
Tate County	1
Tippah County	1
Tishomingo County	1
Tunica County	2
Union County	4
Walthall County	2
Warren County	11
Washington County	8
Wayne County	1
Webster County	1
Wilkinson County	2
Winston County	5
Yalobusha County	5
Yazoo County	11
Total	139
New Jersey (February):	
Essex County	2
Monmouth County	1
Morris County	1
Total	4
Ohio (February):	
Butler County	2

City Reports for Week Ended Mar. 8, 1919.

Place.	Cases.	Deaths.
Baton Rouge, La.	1	1
Jersey City, N. J.	1	
Joplin, Mo.	1	

Place.	Cases.	Deaths.
New Orleans, La.	1	
Tuscaloosa, Ala.	1	
Washington, D. C.		

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MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.
Camp Devens zone, Mass.	6
Camp Dix zone, N. J.	6
Camp Dodge zone, Iowa	3
Fayetteville sanitary district, N. C.	25
Gas and flame school zone, Ga. and Ala.	7
Camp Gordon zone, Ga.	23
Gulfport health district, Miss.	6
Camp Jackson zone, S. C.	1
Camp Lee zone, Va.	3
Camp Lewis zone, Wash.	2
Camp Merritt zone, N. J.	1
Muscle Shoals sanitary district, Ala.	1
Picric acid plant zone, Ga.	8
Camp Pike zone, Ark.	1
Camp Polk zone, N. C.	7
Portsmouth and Norfolk County health district, Va.	11
Camp Zachary Taylor zone, Ky. and Ind.	20
Tidewater health district, Va.	1
Camp Upton zone, N. Y.	1
Wilmington sanitary district, N. C.	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 661.

PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.
Gas and flame school zone, Ga. and Ala.	2
Picric acid plant zone, Ga.	1

State Reports for January and February, 1919.

Place.	New cases reported.
California (January):	
Orange County	1
Minnesota (February):	
Hennepin County—	
Minneapolis	1
Mississippi (February):	
Adams County	6
Alcorn County	3
Amite County	2
Bolivar County	19
Calhoun County	2
Carroll County	5
Chickasaw County	4
Choctaw County	2
Claiborne County	2
Clarke County	2
Clay County	3
Coahoma County	15
Copiah County	3
Covington County	2
De Soto County	3
Forrest County	6
George County	4
Hinds County	31
Holmes County	10
Humphreys County	6
Itawamba County	2
Jasper County	4
Jefferson Davis County	2
Jones County	11
Kemper County	1
Lamar County	2
Lauderdale County	1
Lawrence County	4
Lee County	9
Leflore County	1
Lincoln County	9
Lowndes County	3
Madison County	10
Marion County	4
Marshall County	8
Monroe County	12
Montgomery County	4
Oktibbeha County	8
Panola County	2
Pearl River County	17
Pontotoc County	2
Prentiss County	3
Quitman County	3
Sharkey County	4
Simpson County	3
Smith County	3
Stone County	1
Sunflower County	1
Tallahatchie County	5
Tate County	1
Tippah County	2
Tishomingo County	1
Tunica County	9
Union County	4
Walthall County	5
Warren County	3
Washington County	9
Wayne County	2
Winston County	1
Yazoo County	7
Total	313

City Reports for Week Ended Mar. 8, 1919.

Place.	Cases.	Deaths.
Birmingham, Ala.	2	3
Dallas, Tex.	.....	1
Galveston, Tex.	.....	1
Melrose, Mass.	1	1
Memphis, Tenn.	.....	1
Mobile, Ala.	.....	1
Nashville, Tenn.	.....	1
New Orleans, La.	1	1
Raleigh, N. C.	.....	1

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PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	3	Camp Pike zone, Ark	8
Camp Funston zone, Kans	3	Camp Polk zone, N. C	1
Gas and flame school zone, Ga. and Ala	2	Camp Sherman zone, Ohio	5
Camp Gordon zone, Ga	2	Camp Zachary Taylor zone, Ky. and Ind	8
Camp A. A. Humphreys zone, Va	1	Tidewater health district, Va	1
Camp Lewis zone, Wash	1	Camp Upton zone, N. Y	4
Camp Merritt zone, N. J	4	Wilmington sanitary district, N. C	1
Picric acid plant zone, Ga	4		

City Reports for Week Ended Mar. 8, 1919.

Place.	Lobar.		All forms	
	Cases.	Deaths.	Cases.	Deaths.
Adrian, Mich	1	1		
Akron, Ohio	2			
Ann Arbor, Mich	6			
Asbury Park, N. J	2	1		
Atlanta, Ga			1	0
Baltimore, Md	31	19		
Baton Rouge, La			6	1
Belleville, N. J	4			
Bloomfield, N. J	6	2		
Blue field, W. Va	7			
Boston, Mass	55	22		
Brookline, Mass	2	1		
Brunswick, Ga	1			
Burlington, Vt	1			
Cambridge, Mass	1			
Camden, N. J	17			
Cape Girardeau, Mo	3	1		
Charleston, W. Va			7	0
Chelsea, Mass	1			
Chicago, Ill			434	
Chillicothe, Ohio			4	0
Cleveland, Ohio	56	61		
Coffeyville, Kans	1			
Colorado Springs, Colo			4	
Cranston, R. I	1	1	2	2
Cumberland, Md	4	3		
Danville, Ill			0	0
Dayton, Ohio	6	6		
Detroit, Mich	6	34	22	6
Dover, N. H			1	0
Duluth, Minn	5	3		
Durham, N. C	2			
East Orange, N. J			7	1
Elizabeth, N. J	4	6		
Elmira, N. Y	3	7		
El Paso, Tex	11	11		
Englewood, N. J	4	1		
Everett, Mass	2	1		
Fall River, Mass	10	6		
Findlay, Ohio	11	1		
Fitchburg, Mass	2	1		
Flint, Mich	1	6		
Fort Worth, Tex	6			
Fremont, Nebr			1	
Fresno, Calif			12	1
Grand Rapids, Mich	9	2		
Greenfield, Mass	2	1		
Greenwich, Conn	1	1		
Hackensack, N. J	1	3		
Haverhill, Mass	3	2		
Highland Park, Mich	3			
Holyoke, Mass	3	2		
Jamestown, N. Y			0	1
Jersey City, N. J	4			
Joplin, Mo	2			
Kalamazoo, Mich	1			
Kansas City, Kans			6	
Kansas City, Mo	26	12		
Kearny, N. J	5	1		
Lackawanna, N. Y	8			
Lakewood, Ohio	2	2		

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PNEUMONIA—Continued.

City Reports for Week Ended Mar. 8, 1919—Continued.

Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
Lawrence, Mass.	2			
Los Angeles, Calif.	2	2		
Louisville, Ky.	22	45		
Lowell, Mass.	1	2		
Ludington, Mich.	1			
Lynn, Mass.	2	3		
Manitowoc, Wis.			3	2
Mason City, Iowa.			4	
Melrose, Mass.	1	1		
Montclair, N. J.			4	
Morgantown, W. Va.	3	2		
Morristown, N. J.			2	1
Mount Vernon, N. Y.	1	2		
Natick, Mass.	1			
Newark, N. J.	57	17		
New Bedford, Mass.	5	2		
New Britain, Conn.	3			
Newburgh, N. Y.	1	1		
Newburyport, Mass.	1	2		
New Orleans, La.	1	9		
Newton, Mass.	1	1		
New York, N. Y.		257	443	492
Northampton, Mass.	1			
North Tonawanda, N. Y.	5			
Norwood, Ohio.	3	4		
Oakland, Calif.			1	4
Orange, N. J.	2	2		
Ossining, N. Y.	1	1		
Palestine, Tex.	4	4		
Passaic, N. J.	4	1		
Paterson, N. J.	47			
Philadelphia, Pa.	130	66		
Phillipsburg, N. J.	1	1		
Pontiac, Mich.	2			
Port Chester, N. Y.	1	3		
Reno, Nev.	4	3		
Richmond, Va.	1	6		
Roanoke, Va.	2	1		
Rochester, N. Y.	11	7		
Sacramento, Calif.	1		2	
Saginaw, Mich.	2	4		
Salem, Mass.	6	5		
San Antonio, Tex.	11	6		
San Diego, Calif.	1	1		
Sandusky, Ohio.			5	
San Francisco, Calif.	9	9		
Santa Cruz, Calif.	1			
Schenectady, N. Y.	3			
Somerville, Mass.	1			
Springfield, Mass.	16	2		
Steubenville, Ohio.	1			
Toledo, Ohio.	2	8		
Trenton, N. J.	2	2		
Tuscaloosa, Ala.	1			
Westfield, Mass.	2			
West Orange, N. J.	2			
Winston-Salem, N. C.	4	2		
Worcester, Mass.			6	
Yonkers, N. Y.	7	7		

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POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for January and February, 1919.

Place	New cases reported.
California (January):	
Alameda County—	
Oakland	1
San Francisco	1
Total	2
Connecticut (February):	
Fairfield County—	
Bridgeport	1
Illinois (February):	
Cook County—	
Chicago	3
Will County—	
Crete	1
Total	4
Louisiana (February):	
Claiborne Parish	1

Place.	New cases reported.
Michigan (February):	
Wayne County—	
Detroit	1
Mississippi (February):	
Adams County	6
Lee County	4
Total	[illegible]
New Jersey (February):	
Hudson County	1
Ohio (February):	
Carroll County	1
Franklin County	2
Hamilton County	1
Montgomery County	2
Portage County	1
Total	[illegible]

City Reports for Week Ended Mar. 8, 1919.

Place.	Cases.	Deaths.
Boston, Mass	1	1
Covington, Ky	1	
Minneapolis, Minn	1	1
Oakland, Calif	1	
Passaic, N. J	1	1

RABIES IN ANIMALS.

City Reports for Week Ended Mar. 8, 1919.

During the week ended March 8, 1919, rabies in animals was reported in cities as follows: Colorado Springs, Colo., 1 case; Kansas City, Mo., 1 case; Memphis, Tenn., 2 cases; Rochester, N. Y., 1 case.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.
Camp Devens zone, Mass	1
Camp Dodge zone, Iowa	12
Camp Funston zone, Kans	8
Gas and Flame School zone, Ga. and Ala	1
Camp Gordon zone, Ga	7
Camp Lee zone, Va	1
Camp Merritt zone, N. J	1
Camp Pike zone, Ark	[illegible]
Portsmouth and Norfolk County health district, Va	[illegible]
Camp Zachary Taylor zone, Ky. and Ind	[illegible]
Tidewater health district, Va	[illegible]
Camp Travis zone, Tex	[illegible]
Wilmington sanitary district, N. C	[illegible]

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 661

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.
Camp Dodge zone, Iowa	3
Fayetteville sanitary district, N. C	2
Gas and Flame School zone, Ga. and Ala	9
Camp Gordon zone, Ga	48
Muscle Shoals sanitary district, Ala	2
Camp Pike zone, Ark	3
Camp Polk zone, N. C	[illegible]
Portsmouth and Norfolk County health district, Va	[illegible]
Camp Zachary Taylor zone, Ky. and Ind	[illegible]
Tidewater health district, Va	[illegible]
Camp Travis zone, Tex	[illegible]

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SMALLPOX—Continued.

State Reports for January and February, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within seven years preceding attack.	Number last vaccinated more than seven years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
California (January):						
Alameda County—						
Berkeley	2					2
Alameda	1			1		
Oakland	1				1	
Butte County	3				3	
Chico	2				2	
Fresno County	5				5	
Imperial County	1				1	
Kern County	1			1		
Los Angeles County	1				1	
Long Beach	13		1	1	11	
Los Angeles	8		1	2	5	
Monterey County	5			1	1	3
Orange County	1				1	
Santa Ana	1				1	
Riverside County	1				1	
San Bernardino County	1			1		
San Bernardino	3				3	
San Benito County	3				1	2
San Diego County	3				3	
San Francisco	15		2		13	
San Mateo County—						
Daly City	1			1		
Santa Clara County	6				6	
San Jose	1				1	
Santa Cruz County	4		1		3	
Watsonville	25				24	
Siskiyou County—						
Sisson	1				1	
Tehama County—						
Red Bluff	1				1	
Tulare County	1				1	
Visalia	3				1	2
Total	109		5	8	87	9
Michigan (February):						
Allegan County—						
Casco Township	5				5	
Berrien County—						
New Buffalo	1				1	
Weesaw Township	1					1
Calhoun County—						
Battle Creek	1				1	
Clare County—						
Harrison	4				4	
Eaton County—						
Walton Township	1				1	
Genesee County—						
Flint	1					1
Gogebic County—						
Ironwood	5		1		4	
Houghton County—						
South Range	4		1		3	
Ingham County—						
East Lansing	2		2			
Lansing	33				27	6
Ionia County—						
Odessa Township	1				1	
Jackson County—						
Blackman Township	1					1
Jackson	1					1
Kalamazoo County—						
Alamo Township	1				1	
Cooper Township	1				1	
Kalamazoo Township	3				3	
Kalamazoo	7				6	
Kent County—						
Grand Rapids	2					

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SMALLPOX—Continued.

State Reports for January and February, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases			
			Number vaccinated within seven years preceding attack.	Number last vaccinated more than seven years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Michigan (February)—Continued.						
Keweenaw County—						
Allouez Township	7				7	
Ahmeek	7				5	1
Lenawee County—						
Adrian Township	2				2	
Fairfield Township	4				4	
Palmyra Township	1				1	
Rome Township	2			1	1	
Mason County—						
Pere Marquette Township	1			1		
Ludington	2				2	
Menominee County—						
Menominee	5				3	2
Midland County—						
Ingersoll Township	5				5	
Lincoln Township	1					1
Coleman	2				2	
Montcalm County—						
Fairplains Township	2				2	
Oakland County—						
Holly Township	2		1		1	
Holly	3				3	
Pontiac	1				1	
Oceana County—						
Golden Township	1		1			
Ogemaw County—						
Edwards Township	3				3	
Van Buren County—						
Law Paw Township	1					1
Wayne County—						
Highland Park	1				1	
Detroit	15					
Total	143		6	2	101	34
Minnesota (February):						
Anoka County—						
Columbia Heights	5				5	
Beltrami County—						
Bemidji	1				1	
Blue Earth County—						
Mankato	1					1
Cass County—						
Pine River	2				1	1
Faribault County—						
Blue Earth	4					4
Freeborn County—						
Bath Township	1				1	
Hennepin County—						
Minneapolis	29			8	21	
Kanabec County—						
Comfort Township	8			2	5	1
Peace Township	1				1	
McLeod County—						
Hutchinson	1		1			
Norman County—						
Twin Valley	7		5	2		
Hendrum Township	2			1	1	
Waukon Township	1				1	
Olmsted County—						
Rochester	1					1
Otter Tail County—						
Fergus Falls	1				1	
Perham	1					1
Richville	13			1	12	
Pennington County—						
Rocksbury Township	1				1	
Polk County—						
Crookston Township	8				8	

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SMALLPOX—Continued.

State Reports for January and February, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within seven years preceding attack.	Number last vaccinated more than seven years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Minnesota—(February)—Continued.						
Ramsey County—						
St. Paul	87				87	
Rice County—						
Webster Township	4				4	
Rock County—						
Luverne	5				5	
Luverne Township	1				1	
Springwater Township	1				1	
St. Louis County—						
Duluth	14				14	
Scott County—						
Shakopee	13				13	
Sherburne County—						
Haven Township	2				2	
Stearns County—						
St. Cloud	1				1	
Todd County—						
Staples	1				1	
Wabasha County—						
Watopa Township	3				3	
Waseca County—						
Janesville Township	1				1	
Wilkin County—						
Breckenridge	2				2	
Wright County—						
Cokato	1				1	
Total	221		6	14	192	9
New Jersey (February):						
Burlington County	2				2	
Ohio (February):						
Belmont County	3		2			1
Butler County	103			2	59	42
Champaign County	1					1
Clermont County	1				1	
Clinton County	1					1
Coshocton County	10				4	6
Crawford County	2				2	
Cuyahoga County	26					26
Darke County	1			1		
Fayette County	1				1	
Franklin County	6		1		4	1
Fulton County	4					4
Guernsey County	2					2
Hamilton County	20				5	15
Harrison County	1					1
Highland County	3					3
Holmes County	1					1
Jefferson County	5				5	
Knox County	1			1		
Lorain County	9				3	6
Lucas County	4				1	3
Mahoning County	17				1	16
Miami County	17		1		9	7
Montgomery County	37			1	30	6
Muskingum County	6				5	1
Sandusky County	8				5	3
Scioto County	4				4	
Seneca County	7				2	5
Stark County	7					7
Summit County	2					2
Trumbull County	3				3	
Tuscarawas County	33			3	26	4
Warren County	11			1	8	2
Wood County	3					3
Wyandot County	1					1
Total	361		4	9	178	170

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SMALLPOX—Continued.

State Reports for January and February, 1919.

Place.	Cases.	Deaths.
Illinois (February):		
Bond County—		
Shoal Creek Township	2	
Brown County—		
Mount Sterling	7	
Pea Ridge Township	1	
Bureau County—		
Spring Valley	1	
Champaign County—		
Urbana	5	
Christian County—		
Greenwood Township	2	
Palmer	1	
Taylorville	1	
Clark County—		
Marshall	1	
Cook County—		
Arlington Heights	17	
Chicago	5	
Elk Grove Township	1	
Evanston	2	
Maine Township	2	
Wheeling Township	3	
Fayette County—		
St. Elmo	2	
Fulton County—		
Canton	1	
Kane County—		
Elgin	15	
Elgin Township	1	
Hanover Township	1	
Knox County—		
Galesburg	2	
Knox Township	1	
Knoxville	1	
La Salle County—		
Earlville	1	
Lee County—		
Amboy	1	
Logan County—		
Atlanta	1	
Mount Pulaski Township	1	
Madison County—		
Alton	3	
Madison	1	
Marion County—		
Odin	4	
Salem	22	
Stevenson Township	1	
Mason County—		
Havana	2	
McLean County—		
Bloomington	4	
Normal	6	
Montgomery County—		
Hillsboro	20	
Schram City	9	
Morgan County—		
Jacksonville	1	
Peoria County—		
Kingston Mines	1	
Peoria	13	
Perry County—		
Du Quoin precinct	1	
Pulaski County—		
America Township	9	
Rock Island County—		
Milan	1	
Saugamon County—		
Springfield	7	
St. Clair County—		
O'Fallon	1	
O'Fallon Township	1	
Tazewell County—		
Pekin	40	
South Pekin	1	
Tremont Township	2	
Illinois (February)—Continued.		
Will County—		
Joliet	2	
Winnebago County—		
Rockford	10	
State institutions—		
Soldiers' Orphan Home Normal	3	
Total	244	
Louisiana (February):		
Acadia Parish	2	
Allen Parish	6	
Avoyelles Parish	2	
Beauregard Parish	34	
Caddo Parish	8	
Calcasieu Parish	21	
Evangeline Parish	3	
Iberia Parish	1	
Jefferson Parish	1	
Jefferson Davis Parish	14	
Lafayette Parish	7	
Livingston Parish	11	
Morehouse Parish	4	
Natchitoches Parish	24	
Ouachita Parish	1	
Orleans Parish	9	
Rapides Parish	1	
Richland Parish	12	
St. Landry Parish	6	
Vermilion Parish	20	
Winn Parish	1	
Total	217	
Maine (February):		
Androscoggin County—		
Lewiston	1	
Aroostook County—		
Frenchville (town)	14	
Madawaska (town)	8	
Fort Kent (town)	7	
Guerette	24	
Piscataquis County—		
Katahdin Iron Works	2	
Total	56	
Mississippi (February):		
Alcorn County	1	
Attala County	8	
Bolivar County	40	
Carroll County	2	
Chickasaw County	5	
Clarke County	20	
Clay County	4	
Coahoma County	1	
Holmes County	7	
Humphreys County	2	
Jones County	5	
Lauderdale County	13	
Lawrence County	3	
Leake County	7	
Leflore County	8	
Madison County	15	
Neshoba County	7	
Pearl River County	3	
Perry County	13	
Pike County	4	
Rankin County	1	
Sharkey County	5	
Simpson County	3	
Stone County	1	
Sunflower County	2	
Tallahatchie County	8	
Tippah County	15	

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SMALLPOX—Continued.

State Reports for January and February, 1919—Continued.

Place.	Cases.	Deaths.
Mississippi (February)—Contd.		
Tishomingo County	2	
Tunica County	1	
Warren County	3	
Wayne County	1	
Yalobusha County	7	
Total	220	
Montana (February):		
Beaverhead County	3	
Cascade County	1	
Great Falls	2	
Custer County	1	
Dawson County	3	
Deerlodge County—		
Anaconda	2	
Fergus County	1	
Lewistown	6	
Flathead County	1	
Kalispell	1	
Granite County	29	
Lewis and Clark County—		
Helena	1	
Missoula County—		
Missoula	1	
Ravalli County	1	
Sheridan County	3	
Silver Bow County—		
Butte	6	
Stillwater County	7	
Teton County	1	
Toole County	1	
Wheatland County	5	
Yellowstone County—		
Billings	3	
Total	79	
North Carolina (February):		
Alamance County	1	
Anson County	5	
Ashe County	3	
Beaufort County	6	
Bertie County	2	
Cabarrus County	8	
Cherokee County	1	
Durham County	1	
Forsyth County	64	
Gaston County	11	
Graham County	2	
Guilford County	28	
Harnett County	1	
Hertford County	1	
Iredell County	1	
Lenoir County	1	
Lincoln County	1	
Mecklenburg County	2	
Montgomery County	4	
Perquimans County	8	
Pitt County	6	
Randolph County	9	
Rockingham County	5	
Rowan County	3	
Rutherford County	4	
Stanly County	7	
Surry County	3	
Wake County	10	
Washington County	1	
Wilkes County	1	
Yadkin County	2	
Total	202	

Place.	Cases.	Deaths.
Oregon (February):		
Clackamas County	4	
Jackson County	2	
Lane County	1	
Linn County	1	
Marion County	18	
Morrow County	1	
Umatilla County	1	
Portland	39	
Total	67	
Washington (January):		
Adams County—		
Ritzville	1	
Grant County—		
Quincy	4	
Grays Harbor—		
Hoquiam	2	
King County	3	
Kirkland	3	
Seattle	27	
Kittitas County	10	
Ellensburg	2	
Okanogan County	1	
Pierce County	2	
Puyallup	4	
Tacoma	10	
Skamania County	1	
Spokane County	1	
Hillyard	1	
Rockford	6	
Spokane	19	
Stevens County—		
Colville	1	
Thurston County	4	
Olympia	3	
Whitman County—		
Palouse	1	
Yakima County	21	
Granger	1	
Yakima	30	
Total	153	
West Virginia (February):		
Braxton County	3	
Brooke County	3	
Cabell County	2	
Fayette County	1	
Greenbrier County	12	
Jefferson County	4	
Kanawha County	17	
Logan County	1	
McDowell County	7	
Marion County	3	
Mason County	1	
Mercer County	13	
Mingo County	10	
Putnam County	4	
Raleigh County	15	
Randolph County	2	
Wayne County	1	
Wyoming County	31	
Total	130	

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SMALLPOX—Continued.

City Reports for Week Ended Mar. 8, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Adrian, Mich	5		Louisville, Ky	2	
Alameda, Calif	1		Madison, Wis	1	
Ann Arbor, Mich	1		Marinette, Wis	1	
Atchison, Kans	12		Memphis, Tenn	8	
Atlanta, Ga	31		Middletown, Ohio	2	
Baltimore, Md	6		Milwaukee, Wis	4	
Bangor, Me	1		Minneapolis, Minn	11	
Bedford, Ind	2		Mobile, Ala	1	
Beloit, Wis	5		Moline, Ill	1	
Billings, Mont	1		Muskogee, Okla	2	
Birmingham, Ala	3		Nashville, Tenn	1	
Bluefield, W. Va	2		New Orleans, La	1	
Brunswick, Ga	2		Norfolk, Va	4	
Camden, N. J	1		Oakland, Calif	1	
Cape Girardeau, Mo	3		Ogden, Utah	14	
Cedar Rapids, Iowa	11		Oklahoma City, Okla	14	
Centralia, Ill	4		Omaha, Nebr	21	
Chanute, Kans	7		Palestine, Tex	10	
Charleston, W. Va	2		Pekin, Ill	7	
Chicago, Ill	2		Peoria, Ill	8	
Cincinnati, Ohio	4		Portland, Oreg	12	
Cleveland, Ohio	2		Racine, Wis	4	
Council Bluffs, Iowa	4		Raleigh, N. C	1	
Covington, Ky	1		Redlands, Calif	2	
Dallas, Tex	8		Roanoke, Va	2	
Davenport, Iowa	16		Rockford, Ill	1	
Denver, Colo	7		Sacramento, Calif	1	
Des Moines, Iowa	3		St. Cloud, Minn	1	
Dubuque, Iowa	1		St. Joseph, Mo	4	
Duluth, Minn	2		St. Louis, Mo	3	
Durham, N. C	2		St. Paul, Minn	20	
Eau Claire, Wis	4		Salt Lake City, Utah	5	
Elgin, Ill	3		San Antonio, Tex	3	
Fort Worth, Tex	6		San Francisco, Calif	20	
Grand Forks, N. Dak	1		Seattle, Wash	13	
Grand Rapids, Mich	2		Sioux City, Iowa	4	
Greeley, Colo	3		South Bend, Ind	3	
Greenville, S. C	1		Steubenville, Ohio	1	
Houston, Tex	1		Superior, Wis	3	
Hutchinson, Kans	1		Tacoma, Wash	7	
Indianapolis, Ind	1		Toledo, Ohio	7	
Joplin, Mo	1		Washington, D. C	1	
Kalamazoo, Mich	2		Wheeling, W. Va	1	
Kansas City, Kans	7		Winston-Salem, N. C	9	
La Fayette, Ind	1		Yakima, Wash	14	
Lincoln, Nebr	12		Youngstown, Ohio	11	
Logansport, Ind	1		Zanesville, Ohio	3	
Los Angeles, Calif	1				

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.		Cases.
Camp Dodge zone, Iowa	1	Picric Acid plant zone, Ga	1
Gas and Flame school zone, Ga. and Ala	2	Camp Pike zone, Ark	21
Camp Gordon zone, Ga	43	Camp Polk zone, N. C	4
Gulfport health district, Miss	1	Camp Sheridan zone, Ala	16
Camp A. A. Humphreys zone, Va	1	Camp Sherman zone, Ohio	2
Camp Jackson zone, S. C	25	Camp Zachary Taylor zone, Ky and Ind	23
Camp Lee zone, Va	6	Tidewater health district, Va	1
Muscle Shoals sanitary district, Ala	7	Camp Travis zone, Tex	1

TETANUS.

City Reports for Week Ended Mar. 8, 1919.

During the week ended March 8, 1919, tetanus was reported as follows: Mobile, Ala., 2 deaths; San Diego, Cal., 1 case and 1 death; Trenton, N. J., 1 death.

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TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.
Camp Devens zone, Mass	3
Gas and Flame school zone, Ga. and Ala	1
Camp Gordon zone, Ga	4
Gulfport health district, Miss	1
Camp A. A. Humphreys zone, Va	1
Camp Jackson zone, S. C	2
Camp Lee zone, Va	1
Muscle Shoals sanitary district, Ala	2
Picric Acid plant zone, Ga	1
Camp Pike zone, Ark	1
Camp Polk zone, N. C	1
Portsmouth and Norfolk County health district Va	1
Camp Zachary Taylor zone, Ky. and Ind	7
Tidewater health district, Va	1
Camp Travis zone, Tex	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 661.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 22, 1919.

	Cases.
Camp A. A. Humphreys zone, Va	2
Camp Pike zone, Ark	1
Camp Zachary Taylor zone, Ky. and Ind	3
Wilmington sanitary district, N. C	2

State Reports for January and February, 1919.

Place.	New cases reported.
California (January):	
Alameda County—	
Berkeley	5
Oakland	3
Los Angeles County	3
Long Beach	1
Los Angeles	12
Riverside County—	
Corona	1
Riverside	1
Sacramento County—	
Sacramento	1
San Francisco	5
San Bernardino County—	
San Bernardino	1
Total	33
Connecticut (February):	
Fairfield County—	
Danbury	1
New Haven County—	
Meriden	1
New Haven	3
New London County—	
Groton	1
Total	6
Illinois (February):	
Brown County—	
Buckhorn township	1
Cook County—	
Chicago	7
Dekalb County—	
Sandwich	2
Knox County—	
Galesburg	2
Lake County—	
North Chicago	1
La Salle County—	
Oglesby	1
Peru	1
Macon County—	
Decatur	1
Randolph County—	
Sparta	1
Shelby County—	
Moweaqua	1
St. Clair County—	
Summerfield	1
Illinois (February)—Continued.	
Washington County—	
Nashville	1
Williamson County—	
Johnson City	1
Winnebago County—	
Rockford	2
State Institutions—	
Jacksonville School for Deaf	4
Total	27
Louisiana (February):	
Beauregard Parish	2
Caddo Parish	2
Jefferson Parish	3
Natchitoches Parish	1
Orleans Parish	2
Rapides Parish	1
Vermilion Parish	1
Webster Parish	1
Total	13
Maine (February):	
Cumberland County—	
Portland	2
Piscataquis County—	
Dover (town)	2
Foxcroft (town)	3
Sagadahoc County—	
Bath	1
Total	8
Michigan (February):	
Clinton County—	
Bingham Township	1
Eaton County—	
Grand Ledge	2
Grand Traverse County—	
Traverse City	3
Gratiot County—	
Alma	1
Ingham County—	
Lansing	1
Leelanau County—	
Elmwood Township	1
Lenawee County—	
Macon Township	4

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TYPHOID FEVER—Continued.

State Reports for January and February, 1919—Continued.

Place.	New cases reported.
Michigan (February)—Continued.	
Livingston County—	
Cohoctah Township	1
Monroe County—	
Bedford Township	1
Tuscola County—	
Novesta Township	2
Total	17
Minnesota (February):	
Carlton County—	
Carlton	1
Hennepin County—	
Minneapolis	2
Itasca County—	
Coleraine	1
Koochiching County—	
International Falls	2
Marshall County—	
Warren	1
Ramsey County—	
St. Paul	1
Rice County—	
Faribault	2
St. Louis County—	
Hibbing	1
Kinney	8
Soudan	1
Tower	1
Scott County—	
Shakopee	1
Watonwan County—	
Madelia	1
Total	23
Mississippi (February):	
Alcorn County	1
Amite County	1
Atta'a County	1
Bolivar County	3
Calhoun County	1
Carroll County	1
Chickasaw County	4
Choctaw County	12
Forrest County	1
Franklin County	11
Hancock County	1
Harrison County	6
Hinds County	5
Jefferson County	1
Kemper County	2
Lafayette County	1
Lawrence County	1
Leake County	3
Lincoln County	3
Madison County	4
Marion County	1
Marshall County	3
Montgomery County	3
Panola County	2
Sunflower County	2
Tate County	1
Tishomingo County	1
Tunica County	1
Warren County	2
Washington County	4
Webster County	2
Winston County	3
Yalobusha County	2
Yazoo County	1
Total	91
New Jersey (February):	
Atlantic County	1
Burlington County	2

Place.	New cases reported.
New York (February)—Continued.	
Camden County	1
Cumberland County	1
Essex County	4
Middlesex County	1
Monmouth County	1
Ocean County	1
Passaic County	1
Union County	2
Warren County	1
Total	16
North Carolina (February):	
Cabarrus County	1
Clay County	1
Cleveland County	1
Columbus County	1
Craven County	1
Durham County	1
Halifax County	1
Jackson County	2
Johnston County	1
Lenoir County	1
Mecklenburg County	1
Mitchell County	1
Pamlico County	6
Pitt County	1
Rockingham County	2
Sampson County	1
Stanley County	1
Total	22
Ohio (February):	
Allen County	1
Ashtabula County	1
Athens County	1
Belmont County	3
Butler County	1
Clinton County	1
Coshocton County	2
Crawford County	1
Cuyahoga County	1
Fairfield County	1
Franklin County	2
Fulton County	5
Gallia County	1
Guernsey County	1
Hamilton County	4
Highland County	1
Lawrence County	6
Licking County	1
Lorain County	1
Lucas County	4
Meigs County	1
Montgomery County	1
Pickaway County	3
Portage County	6
Sandusky County	1
Seneca County	1
Shelby County	1
Summit County	4
Trumbull County	1
Tuscarawas County	2
Union County	2
Warren County	2
Washington County	1
Wood County	1
Total	59
Oregon (February):	
Lane County	1
Portland	2
Total	3

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TYPHOID FEVER—Continued.

State Reports for January and February, 1919—Continued.

Place.	New cases reported.
Washington (January):	
Ferry County—	
Republic	1
Pierce County	3
Walla Walla County—	
Walla Walla	1
Waitsburg	2
Yakima County—	
Yakima	5
Total	12
West Virginia (February):	
Braxton County	4
Fayette County	2
West Virginia (February)—Continued.	
Gilmer County	1
Greenbrier County	4
Jackson County	1
Kanawha County	8
Logan County	1
Monongalia County	1
Monroe County	2
Ritchie County	1
Summers County	2
Upshur County	2
Wirt County	1
Total	30

City Reports for Week Ended Mar. 8, 1919.

Place.	Cases.	Deaths.
Austin, Tex	1	
Baltimore, Md	3	1
Birmingham, Ala		1
Bluefield, W. Va	1	
Boston, Mass	2	1
Charleston, W. Va	1	
Chelsea, Mass	1	
Chicago, Ill	2	
Clarksburg, W. Va	1	
Covington, Ky	1	
Dayton, Ohio	1	1
Detroit, Mich	1	
Fall River, Mass	1	
Galveston, Tex	2	
Independence, Mo	2	1
Ironton, Ohio	2	
Jamestown, N. Y	1	
Kansas City, Mo		1
La Crosse, Wis	1	1
Lawrence, Mass	5	
Long Beach, Calif	1	
Louisville, Ky	1	1
Malden, Mass	1	
Memphis, Tenn		1
Middletown, Ohio		1
Moline, Ill		1
Montgomery, Ala	1	1
Newark, N. J	1	
New Orleans, La	1	1
New York, N. Y	5	2
Oakland, Calif	4	
Philadelphia, Pa	3	
Portland, Oreg	2	
Richmond, Va	1	
Riverside, Calif	1	
St. Louis, Mo	1	
San Antonio, Tex	2	1
San Francisco, Calif	2	
Syracuse, N. Y	5	
Toledo, Ohio	2	
Watertown, N. Y		1
Wausau, Wis	5	
Wilmington, Del		1

TYPHUS FEVER.

City Report for Week Ended Mar. 8, 1919.

One case of typhus fever was reported at New Orleans, La., during the week ended March 8, 1919.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for January and February, 1919.

State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.
California (January)	208	81	218
Connecticut (February)	258	671	242
Illinois (February)	687	692	499
Louisiana (February)	38	32	12
Maine (February)	11	18	35
Michigan (February)	646	197	438
Minnesota (February)	334	135	330
Mississippi (February)	63	432	76
Montana (February)	36	29	167
New Jersey (February)	649	191	388
North Carolina (February)	72	543	46
Ohio (February)	380	692	547
Oregon (February)	24	12	25
Rhode Island (February)	120	5	41
Washington (January)	85	57	168
West Virginia (February)	57	68	52

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd

City Reports for Week Ended Mar. 8, 1910.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths	Cases.	Deaths
Abilene, Tex.	14,954	1	3	1			2			
Adams, Mass.	14,406	2								1
Adrian, Mich.	11,570	4					2			
Akron, Ohio.	93,604	32	5		36		3			
Alameda, Cal.	28,433	6	3							
Alton, Ill.	23,783	12								
Anderson, Ind.	24,230	8								1
Ann Arbor, Mich.	15,041	15	1	1			1			
Ansonia, Conn.	16,954	10								
Appleton, Wis.	18,005	1	1				1			
Arlington, Mass.	13,073	9							1	
Asbury Park, N. J.	14,629	1	1							
Ashtabula, Ohio.	22,608	6								
Atchison, Kans.	16,785	1					8			
Atlanta, Ga.	196,144	60			7		4			1
Atlantic City, N. J.	59,515	15			1		2		1	
Attleboro, Mass.	10,776	2	1							
Auburn, N. Y.	37,823	6					2		2	
Austin, Tex.	35,612	8	1				2			1
Bakersfield, Cal.	17,543	6	1	1					1	
Baltimore, Md.	594,637	254	30	3	11		158	7	60	22
Barre, Vt.	12,401	1								1
Baton Rouge, La.	17,544	9	2		4				3	1
Battle Creek, Mich.	30,159		10		1		4			
Bayonne, N. J.	72,204		4				1		1	
Beaumont, Tex.	28,851	13								1
Bedford, Ind.	10,613	1								
Bellaire, Ohio.	14,575	14							1	
Belleville, N. J.	12,797		1				3		1	
Beloit, Wis.	18,547	5					3			1
Benton Harbor, Mich.	11,099	1	1							
Beverly, Mass.	22,128	3							1	
Biddeford, Me.	17,760	6								
Billings, Mont.	15,123		1				7	1		
Birmingham, Ala.	189,716	72			8		3		5	3
Bloomfield, N. J.	19,013						1			
Bloomington, Ind.	11,651		2							
Bluefield, W. Va.	16,123						3			
Boston, Mass.	767,813	300	56	4	5		44	1	63	30
Brazil, Ind.	10,172	5								
Bridgeport, Conn.	124,721	51	8		7		1		3	5
Bristol, Conn.	16,318	7	2	1					1	
Brockton, Mass.	60,152	13	6						2	1
Brookline, Mass.	33,526	7	2		5		2		1	
Brunswick, Ga.	10,984	4			13				2	
Buffalo, N. Y.	475,741	162	45	5	35	1	42	1	27	9
Burlington, Iowa.	25,144	13								
Burlington, Vt.	21,892	16			51	1	1			
Cadillac, Mich.	10,158	2							1	
Cairo, Ill.	15,195	6		1						
Cambridge, Mass.	111,493	36	3		9		1		6	4
Camden, N. J.	108,117		5		1		6		3	
Canton, Ohio.	62,566	17			3		1		2	1
Cape Girardeau, Mo.	11,146	1					2			
Cedar Rapids, Iowa.	38,648						1			
Champaign, Ill.	15,052	2								
Chanute, Kans.	12,968	4								
Charleston, S. C.	61,011	23			1					2
Charleston, W. Va.	31,040	9							1	
Charlotte, N. C.	40,759	15			15				1	
Chelsea, Mass.	48,805	10			2	1	2		1	
Cheyenne, Wyo.	11,020				2					
Chicago, Ill.	2,517,201	854	119	10	272	2	81	5	262	82
Chicopee, Mass.	29,050	7	2							
Cleveland, Ohio.	15,625	6	1							1
Cincinnati, Ohio.	411,208	217	8	1	11		14		11	10
Clarksburg, W. Va.	12,960		5				1			
Cleveland, Ohio.	692,220	199	17	2	6		6		22	20
Clinton, Iowa.	27,078						1			
Clinton, Mass.	13,075	5							1	2
Connellsville, Pa.	18,531						1		2	
Cohoes, N. Y.	25,702	16					7			

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Mar. 8, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Colorado Springs, Colo	38,965	9					3			5
Columbia, S. C	35,165		1		3		1			
Columbus, Ohio	220,135	87			4		6		7	9
Concord, N. H	22,858	11							1	
Corpus Christi, Tex	10,789	2								
Council Bluffs, Iowa	31,838	22	1	1			3			
Covington, Ky	59,623	23	1				3		3	3
Cranston, R. I	26,773	8								
Cumberland, Md	26,686	9	4		48					1
Dallas, Tex	129,738	35	4		1				1	1
Danbury, Conn	22,931	8							1	
Danville, Ill	32,969	15							11	
Danville, Va	20,183	2								
Davenport, Iowa	49,618		2				2			
Dayton, Ohio	128,939	58	2				2			
Denver, Colo	268,439	93	8		1		8			22
Des Moines, Iowa	104,052		3		2		15			
Detroit, Mich	619,648	298	79	1	17		46	2	25	15
Dover, N. H	13,276									2
Duluth, Minn	97,077	14	5		5				4	
Durham, N. C	26,160	5			1				1	
East Chicago, Ind	30,286	4								
East Liverpool, Ohio	22,941	8								
East Orange, N. J	43,761	1	1		3				1	
East Providence, R. I	18,485						5			
Eau Claire, Wis	18,887				7		1			
Elgin, Ill	28,562	13			1		1		1	
Elizabeth, N. J	88,830	33	9	1			3		4	5
Elmira, N. Y	38,272	24	1		6				1	
El Paso, Tex	69,149	35			5		6			6
Englewood, N. J	12,603	1	1				1		2	
Escanaba, Mich	15,854	3								
Eureka, Calif	15,142	4								
Evanston, Ill	29,334	10					2			
Everett, Mass	40,160	8	2		1		3		2	
Fall River, Mass	129,828	52	3		46	2			10	2
Fargo, N. Dak	17,872	6					10			
Findlay, Ohio	14,858	11	1		8		1		1	1
Fitchburg, Mass	42,419	11	2		1				2	
Flint, Mich	57,386	25	5				2			1
Fond du Lac, Wis	21,486	10					3			
Fort Scott, Kans	10,564	1								
Fort Wayne, Ind	78,014	28	3							1
Fort Worth, Tex	109,597	15			12				1	1
Fostoria, Ohio	10,959	4								
Frederick, Md	11,225	8					1			
Freeport, Ill	19,844	2								
Fremont, Nebr	10,080	7								
Fresno, Calif	36,314	10								1
Galesburg Ill	24,629	8								
Galveston, Tex	42,650	9								2
Gardner, Mass	17,554	6								1
Gloversville, N. Y	22,314								1	
Grand Forks, N. Dak	16,342	4								
Grand Rapids, Mich	132,861	35	2		3		5		11	
Great Falls, Mont	[1] 13,948	15			13		2			
Greeley, Colo	11,942				1					
Green Bay, Wis	30,017	10							1	1
Greenfield, Mass	12,251	7	1						1	
Greensboro, N. C	20,171	4								
Greenville, S. C	18,574	3								
Greenwich, Conn	19,594						2		1	1
Hackensack, N. J	17,412	8			1				2	
Hammond, Ind	27,016	14	1						1	1
Harrison, N. J	17,345						2		1	
Haverhill, Mass	49,180	62	4		2		1		4	2
Highland Park, Mich	33,859	1	8				1			
Hoboken, N. J	78,524	24	7	1	2				1	2
Holland, Mich	12,459	1								
Holyoke, Mass	66,303	17	1	1			1		1	1
Houston, Tex	116,878	47	1		11		1			7
Hudson, N. Y	12,898	5								3
Huntington, W. Va	47,086						11			

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd

City Reports for Week Ended Mar. 8, 1910—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Hutchinson, Kans.	21,461				4					
Independence, Mo.	11,964	6	1						2	
Indianapolis, Ind.	283,622	84	9	1	3[2]		11			1
Iowa City, Iowa.	11,626						2			
Ironton, Ohio.	14,079	5	1				1			
Ironwood, Mich.	15,095	4					1			1
Ithaca, N. Y.	16,017	8			1		18			2
Jamestown, N. Y.	37,431	10	4				4		1	
Jersey City, N. J.	312,557		22		22		6		12	
Johnstown, N. Y.	10,678	2								
Joplin, Mo.	33,400	7	1		2				5	
Kalamazoo, Mich.	50,408	20			1		2		1	1
Kansas City, Kans.	102,096								3	
Kansas City, Mo.	305,816	141	4	1	27	6	4	2	1	12
Kearny, N. J.	24,325	5	2				1			1
Keene, N. H.	10,725	4					1			
Kenosha, Wis.	32,833	7	1		14					
Knoxville, Tenn.	50,112				4		1			
Kokomo, Ind.	21,929	8			1		9			
Lackawanna, N. Y.	16,219	4	3		6				2	2
La Crosse, Wis.	31,835	9	1							1
La Fayette, Ind.	21,481	11	1				2			
Lakewood, Ohio.	23,813	7	1							
Lancaster, Ohio.	16,096	2			3	1	6			
Lawrence, Kans.	13,477				1					
Lawrence, Mass.	102,923	29	2				2		5	9
Leominster, Mass.	21,365	1	1		37				2	
Lexington, Ky.	41,997	37			5					2
Lima, Ohio.	37,145	14					1			
Lincoln, Nebr.	46,957	10	3	1	1		1			
Logansport, Ind.	21,338	9								
Long Beach, Calif.	29,163	11					4			3
Long Branch, N. J.	15,733	2								
Lorain, Ohio.	38,266	21	1		16		4			1
Los Angeles, Calif.	535,485	101	4	1	9		8		25	14
Louisville, Ky.	240,908	174	8		11		4		10	3
Lowell, Mass.	114,366	41	2		8		9		3	4
Lynchburg, Va.	33,497	12								
Lynn, Mass.	104,534	40	2		3		2		4	2
Madison, Wis.	31,315	17			26		6			
Malden, Mass.	52,243	16	1		2		2		5	1
Manchester, Conn.	15,859						2			
Manchester, N. H.	79,607	23	1				1		9	2
Manitowoc, Wis.	13,931	6					2			
Marinette, Wis.	14,610				13		3			
Marion, Ind.	19,923	5	1				8			
Marlboro, Mass.	15,285	3	2						1	
Marquette, Mich.	12,555	3								
Martinsburg, W. Va.	12,984		1		9					
Martins Ferry, Ohio.	10,135	1	6	1						
Mason City, Iowa.	14,938	10								
Medford, Mass.	26,681	15	1				1			2
Melrose, Mass.	17,724	8					2		1	
Memphis, Tenn.	151,877	57			9	1			12	6
Meriden, Conn.	29,431		4	1					1	
Methuen, Mass.	14,350	7					1		1	
Middletown, N. Y.	15,820								1	1
Middletown, Ohio.	16,384	6			5					1
Milford, Mass.	14,280	5						1		1
Milwaukee, Wis.	445,008	123	7	1	5		29		17	10
Minneapolis, Minn.	373,448	108	17				26	2	22	9
Missoula, Mont.	13,075	2					2			
Mobile, Ala.	59,201	55	1		7	1				1
Moline, Ill.	27,970	2					2			
Montclair, N. J.	27,087								2	
Montgomery, Ala.	44,030	14								
Morgantown, W. Va.	14,444	7					1			
Morristown, N. J.	13,410	6	1				4			
Mount Vernon, N. Y.	37,991	7								
Nashville, Tenn.	118,135	62	2		19		6		6	3
Natick, Mass.	10,140	3					1			
Newark, N. J.	418,789	133	34	3	2		20	2	28	14
Newark, Ohio.	30,317	5	2	1			1			

[2] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Mar. 8, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Bedford, Mass	121,622	48	1		1				17	4
New Britain, Conn	55,385	18	1		53		4			3
New Brunswick, N. J	25,855				1				1	
Newburgh, N. Y	29,893	17							1	1
Newburyport, Mass	15,291	12							1	1
New Haven, Conn	152,275	53	13	2	33		1		13	4
New London, Conn	21,199	18	2	1			2		2	
New Orleans, La	377,010	143	5		4		1		36	28
Newport, Ky	32,133	8								
Newport, R. I	30,585	7								2
Newton, Mass	44,345	10	3		1				1	
New York, N. Y	5,737,492	2,084	359	36	55	1	148	10	329	200
Niagara Falls, N. Y	38,466	14	2				1		4	
Norfolk, Va	91,148		1		1				3	1
North Adams, Mass	[1] 22,019	6					1		3	1
Northampton, Mass	20,006	13	1				1		3	4
North Tonawanda, N. Y	14,060	5	1		24				2	
Norwalk, Conn	27,332	1					2			
Norwich, Conn	21,923	2	1						4	2
Norwood, Ohio	23,269	8					1		1	1
Oakland, Calif	208,405	47	8				4		5	3
Oak Park, Ill	27,816	6			2					1
Ogdensburg, N. Y	16,845	6								
Ogden, Utah	32,343	6	2				1			
Oklahoma City, Okla	97,588	31	1		3		1			2
Olean, N. Y	16,927	9								
Omaha, Nebr	177,777	41	6	1	4	1	4			2
Orange, N. J	33,636	17			1		1			1
Oshkosh, Wis	36,549	7								1
Ossining, N. Y	14,084	8	3							
Palestine, Tex	12,075						2			
Parkersburg, W. Va	21,059	4			7		2			
Pasadena, Calif	49,620	8								
Passaic, N. J	74,478	20	4	1	1				2	
Paterson, N. J	140,512	6	9		2		5			
Peekskill, N. Y	19,034	2								
Peoria, Ill	72,184	31								1
Perth Amboy, N. J	42,646	10	1							1
Philadelphia, Pa	1,735,514	631	89	11	39	2	75	2	141	69
Phillipsburg, N. J	15,879	2	1		1					
Piqua, Ohio	14,275	7	1							
Pittsburg, Kans	18,340						2			
Pittsfield, Mass	39,678	13								
Plainfield, N. J	24,330	10	1				6	1		
Plattsburg, N. Y	13,111	2	2							1
Plymouth, Mass	14,001	6								1
Pontiac, Mich	18,006	11	7							
Port Chester, N. Y	16,727	12	1						2	
Portland, Me	64,720	13	1				10			3
Portland, Oreg	308,309	62	2		1		5		6	5
Portsmouth, Va	40,693				10					
Poughkeepsie, N. Y	30,786	12			2				3	
Providence, R. I	259,895	105	11	2			9			11
Quincy, Ill	36,832	12		1	1		1			1
Quincy, Mass	39,022	10	1				2		3	1
Racine, Wis	47,465	13					1		1	
Rahway, N. J	10,361	4								
Raleigh, N. C	20,274	11								1
Redlands, Calif	14,573	1								1
Reno, Nev	15,514	10								
Richmond, Va	158,702	51			11		1	1	7	3
Riverside, Calif	20,496	7							3	1
Roanoke, Va	46,282	14			16		1			1
Rochester, N. Y	264,714	98	14	1	2		18		8	9
Rockford, Ill	56,739	16			20					1
Rock Island, Ill	29,452	5	3	1						
Rocky Mount, N. C	12,673	5							1	1
Rome, N. Y	24,259								2	
Rutland, Vt	15,038	7								
Sacramento, Calif	68,984	22					4		1	3
Saginaw, Mich	56,469	24					3		1	2
St. Cloud, Minn	12,013						1			
St. Joseph, Mo	86,498	25	1				4			2

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Mar. 8, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
St. Louis, Mo.	768,630	275	30	1	7		16		47	18
St. Paul, Minn.	252,465	78	19		31		24	1	20	1
Salem, Mass.	49,346	22	1		1		7		2	1
Salem, Oreg.	21,274	12	1				2			2
Salt Lake City, Utah.	121,623	41	3		1					2
San Angelo, Tex.	[1] 10,321	1								1
San Antonio, Tex.	128,215	12	4		4				6	4
San Bernardino, Calif.	17,616	9								1
San Diego, Calif.	56,412	25	4	1	2		3		9	3
Sandusky, Ohio.	20,226	5							1	
Sanford, Me.	11,217	8								
San Francisco, Calif.	471,023	168	16	3	3		10		28	26
Santa Barbara, Calif.	15,390	3	2							1
Santa Cruz, Calif.	15,150	4								1
Saratoga Springs, N. Y.	13,839	0								
Saugus, Mass.	10,210	1					1		1	
Sault Ste. Marie, Mich.	14,130	1								
Schenectady, N. Y.	103,774	19			1		1		4	1
Seattle, Wash.	366,445		4		19		10			
Sioux City, Iowa.	58,568		1				1			
Somerville, Mass.	88,618	31	4		2		11		3	1
South Bend, Ind.	70,967	15			56		5	1		1
Southbridge, Mass.	14,465	6								1
Spartanburg, S. C.	21,985	4			1					
Spokane, Wash.	157,656		2							
Springfield, Ill.	62,623	21								1
Springfield, Mass.	108,608	34	2	1			5		7	1
Springfield, Mo.	41,189	13								1
Springfield, Ohio.	52,296	23			14				1	2
Steubenville, Ohio.	28,259	27	2							
Stockton, Calif.	36,209	9	2						1	1
Streator, Ill.	14,313	4								
Superior, Wis.	47,167	10	3				1			1
Syracuse, N. Y.	158,559	46	8	2	5		7		6	2
Tacoma, Wash.	117,446		4		10		2			
Taunton, Mass.	36,610	20	1		4	2	1		2	1
Terre Haute, Ind.	67,361	33								2
Toledo, Ohio.	202,010	77	4		2		10		19	10
Topeka, Kans.	49,538	19					3			2
Trenton, N. J.	113,974	50	1						5	6
Troy, N. Y.	78,094	31	3		3		6		2	2
Tuscaloosa, Ala.	10,824	4	1						1	
Utica, N. Y.	89,272	26	5		2		3		3	1
Vallejo, Calif.	13,803	4	1							
Vancouver, Wash.	13,805		1							
Washington, D. C.	369,282	156	22		5		20		26	15
Watertown, N. Y.	30,404	3								1
Wausau, Wis.	19,666	8	1							
Westfield, Mass.	18,769	3	1		1		3		1	
West Hoboken, N. J.	41,388		1		1		1			1
West New York, N. J.	19,613	1	1						1	
West Orange, N. J.	13,964						1			
Wheeling, W. Va.	43,657	24							2	1
White Plains, N. Y.	23,331	3					4		1	
Wichita, Kans.	73,597								1	
Wilmington, Del.	95,369	32	1				1		3	2
Wilmington, N. C.	30,400	7	1				1			3
Winchester, Mass.	10,812	2								
Winona, Minn.	[1] 18,583	5								
Winston Salem, N. C.	33,136	12			15				6	1
Winthrop, Mass.	13,105		1							
Woburn, Mass.	16,076	6								
Worcester, Mass.	166,106	57	8		20		3		7	1
Yakima, Wash.	22,058				1		8			
Yonkers, N. Y.	103,066	14	2		2		2		3	1
Youngstown, Ohio.	112,282	45	2		19	1	1		3	1
Zanesville, Ohio.	31,320	9							1	2

[1] Population Apr. 15, 1910.

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FOREIGN.

BRAZIL.

Influenza—Mortality, Nov.-Dec., 1918—State of São Paulo.

Reports have been received showing the mortality from influenza in the State of São Paulo, Brazil, as follows:

Cities.	Influenza deaths.		Population.
	Nov., 1918.	Dec., 1918.	
São Paulo (capital)	4,580	432	470,872
Campinas	123	81	105,160
Ribeirão Preto	138	66	54,839
Santos	463	18	96,050

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Diseases.	Feb. 11-20, 1919.		Remaining under treatment Feb. 20, 1919.
	New cases.	Deaths.	
Diphtheria	1	.....	1
Leprosy	.....	.....	17
Malaria	25	.....	[1] 39
Paratyphoid fever	.....	.....	1
Scarlet fever	1	.....	2
Typhoid fever	8	5	[2] 21

[1] From the interior, 31. [2] From the interior, 10.

Influenza—Habana—Regla.

During the period from February 11 to 20, 1919, 114 new cases of influenza were notified at Habana and 26 at Regla.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During the Week Ended Mar. 28, 1919.[1]

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt,				Jan. 1-Feb. 6, 1919: Cases, 2; deaths, 1.
Suez	Jan. 31	1	.....	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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Do	Jan. 5-Feb. 1	49	35	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Feb. 1	46	38	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 24-30	4	5	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-18	23	17	
Nueva Ecija	Jan. 12-25	9	6	
Oriental Negros	Nov. 2-9	20	8	
Do	Nov. 17-Dec. 7	6	6	
Do	Jan. 5-Feb. 1	22	16	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Feb. 1	15	12	
Pangasinan	Nov. 2-9	236	192	
Do	Nov. 17-Dec. 28	428	313	
Do	Dec. 29-Feb. 1	119	91	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-25	8	4	
Tayabas	Nov. 2-9	7	4	
Do	Nov. 17-Dec. 28	54	25	
Do	Dec. 29-Feb. 1	54	47	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-18	19	15	
Poland:				
Warsaw	Sept. 29-Oct. 5	2		
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals In military hospitals, July 5-Aug. 21, 1918: Cases, 884; deaths, 783.
Ukrania—				
Ekaterinaslav	Sept. 1-20	7	6	
Odessa	do	25		Sept. 1-20, 1918: 11 cases on s. s. Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
China:				
Amoy	Nov. 24-Dec. 8			Present.
Chungking	Dec. 1-7			Do.
Hongkong	Oct. 1-Dec. 28	4	4	
Do	Jan. 1-31	5	4	

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[redacted]	Jan. 11-17	6		Feb. 7, 1919: Present.
Petitforte	Dec. 7-13	60		Placentia Bay.
Saddle Hill	Feb. 15-21	1		
Springdale	do	1		Harbor Grace.
St. Georges	do	1		
St. Jacques	Feb. 1-28	16		
Panama	Jan. 18-24	2		
Colon				Aug. 1-31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1-25, 1919: Cases, 28.
Do	Dec. 15-21	1		
Philippine Islands:	Dec. 29-Feb. 9	8		
Manila	Nov. 2-9	4	3	
Do	Dec. 29-Feb. 1	6	2	Varioloid, 9.
Portugal:				
Lisbon	Nov. 16-Dec. 28	843		
Portuguese East Africa:				
Lourenco Marques				July 1-Oct. 31, 1918: 45 fatal cases
Siberia:				
Vladivostok	Nov. 1-3	4		
Spain:				
Barcelona	Jan. 9-25		4	
Cadiz	Oct. 1-Dec. 31	18		
Madrid	Sept. 1-Oct. 31	153		
Seville	Nov. 1-30	2		
Valencia	Nov. 10-Dec. 21	40	9	
Do	Dec. 29-Jan. 11	33	4	
Straits Settlements:				
Penang	Oct. 6-12	1		
Union of South Africa:				
Cape Town	Aug. 1-30	1		
Johannesburg	Aug. 1-Oct. 31	12		Nov. 1-30, 1918: Cases, 4.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-30	1		
Austria-Hungary:				
Hungary	Sept. 2-8	2		
Brazil:				
Ceara	Sept. 14-21	1		
Bulgaria:				
Aeteven	Mar. 10			Present.
Rustchuk	do			Do.
China:				
Antung	Dec. 2-15	2		
Do	Jan. 6-12		1	
Chosen (Korea):				
Seoul	Jan. 1-31	2		
Colombia:				
Barranquilla	Nov. 8-Dec. 28		3	
Do	Jan. 5-25	2	2	

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PUBLIC HEALTH REPORTS

VOL. 34 APRIL 4, 1919 No. 14

MAKE DAYLIGHT SAVING CONTRIBUTE TO HEALTH.

Now that daylight saving has again added an hour of daylight to the late afternoon, health officers everywhere should endeavor to make this contribute to general health and welfare by impressing on the people the desirability of spending the extra hour in the open air. In many instances part of the time might well be spent in walking home from work rather than riding in crowded street cars. The suburbanite may find health and pleasure by cultivating a patch of garden. Even the tenement dweller of the large cities may profit by spending some of his leisure time in the parks or, where this is not feasible, on the roof of his house. In some communities organized hiking has been conducted successfully and has contributed largely to the promotion of outdoor life.

LEARN TO ENJOY OUTDOOR LIFE.

DELOUSING.

METHODS USED BY QUARANTINE OFFICERS OF THE PUBLIC HEALTH SERVICE.

In connection with the interesting article on trench fever, published on another page of this report, and especially in view of the prevalence of typhus fever in various parts of Europe, it may not be amiss to describe briefly the delousing procedures ordinarily carried on by the quarantine officers of the United States Public Health Service. The procedure here described was carried out with success in dealing with the threatened introduction of typhus at El Paso in the winter and spring of 1916–1917 and is still being successfully employed there.

All persons coming to El Paso from Mexico who are considered as likely to be vermin infested are sent through this plant for disinfection.

The men and women are separated, men entering one side of the building and women and small children the other. In suitable rooms all clothing is removed and pushed through an opening in the wall into the disinfecting room, where the bundles are placed in

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the steam-chamber carriage run out to receive them. Shoes, hats, belts, and other articles injured by steam are dropped through another opening into a large laundry basket and, when necessary, are exposed to cyanogen.

Persons having money or valuables place such articles in a small cotton bag tied with a string and having a numbered brass check attached. The duplicate number of this check, attached to a card, is given to the owner, who puts it around his neck while bathing.

After all clothing has been removed and passed into the disinfecting room the naked person passes in front of a male or female attendant, as the sex requires, before entering the baths. The attendant examines the head to see if lice are present. If head lice are found, the hair of the men and boys is clipped with No. 00 clippers, the hair dropping onto a newspaper, which is then rolled up and burned. Women with head lice have a mixture of equal parts of kerosene and vinegar applied to the head and hair for half an hour with a towel covering the head. The dilute acetic acid loosens the eggs from the hair and the kerosene kills or stupefies the adult lice, which are removed by washing the head and hair with warm water and soap. If necessary, the process is repeated to dislodge all eggs or nits.

After being passed by the attendant a soap mixture is sprayed upon the body from an elevated reservoir and the person proceeds to the baths. The soap container is a 5-gallon can with a spout in the bottom to which rubber tubing is attached, a clip similar to that on a fountain syringe controlling the spray. The soap is made by boiling 1 part of soap chips in 4 parts of water and then adding 2 parts of kerosene oil. This jellies when cold, and 1 part of this soap jelly is added to 4 parts of warm water, making a good liquid soap at a very small cost.

The attendant watches the bathing process, and when the bath is finished the persons being treated pass into other rooms and wait for their clothing, which is handed back to them from the "clean end" of the steam chamber. No identification checks are placed on the clothing bundles; each person picks out his own bundle.

When the clothes in bundles are passed into the disinfecting room they are at once placed in the carriage of the steam chamber, and as soon as this is filled the chamber is closed. A vacuum of 10 to 15 inches is created in the chamber, and live steam is then introduced until the pressure gauge shows 20 pounds, which gives a temperature of 259° F. This is maintained for 10 minutes to insure penetration of all bundles, after which time the chamber is opened.

The creation of a second vacuum of 10 inches and holding it for 10 minutes will dry the clothes completely, but in the dry climate of El Paso this is unnecessary.

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After the persons are dressed they pass into another room, where they reclaim any bundles they may have had. They are inspected by the foreman in charge of the plant, and all are vaccinated.

The time required for sterilization of clothing is from 25 to 35 minutes, depending on the amount of clothing in the chamber. The effectiveness of this process was determined by wrapping a thermometer inside bundles of clothing placed in different parts of the chamber load, top, bottom, middle, and ends, until the operator learned from such tests exactly how long to expose the clothing. Lice and their eggs are killed by a very short exposure to 212° F., but the higher temperature is easily obtained and is held to insure efficiency.

In connection with this subject the Public Health Service has recently issued the following interesting and instructive reprints which deal with effective methods of killing lice. Copies of these publications may be obtained free of charge by writing to the United States Public Health Service, Washington, D. C.

293. Methods of Destroying Lice. Extract from a report in the British Medical Journal. August 6, 1915.

370. Destroying Lice on Typhus Fever Suspects. By S. B. Grubbs. October 20, 1916.

489. Carbon Tetrachloride Vapor as a Delousing Agent. By M. H. Foster. October 25, 1918.

TRENCH FEVER: A SUMMARY FROM THE LITERATURE.

By MAURICE BUCHHOLTZ, Acting Assistant Surgeon, United States Public Health Service.

Definition.

Trench fever is a blood infection communicable from man to man by means of the louse and possibly other parasites. There are no pathognomonic signs or symptoms recognized. It is not fatal, but the morbidity resulting from it exceeded that from any other disease on the Western Front. Many are permanently unable to resume their former duties, and some pass back to civil life incapacitated—a charge on the State. The disease may arise and spread wherever the body louse is prevalent, provided persons already infected are sent there from endemic areas.

Symptoms.

The onset of the disease is usually sudden, but in some cases a gradual onset is observed. The disease is characterized by recurrent pyrexia, headache, giddiness, pain in the back and limbs (chiefly in the legs, and of considerable severity), a slow pulse in comparison to the degree of fever, conjunctival congestion, sweating, polyuria, a moderate degree of leucocytosis at the height of the fever, with evidence of blood infection and involvement of the spleen and, in

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some of the cases, of the liver also. A certain number of the patients pass into a stage of chronic ill-health, that is, they suffer from recurrent pains in the limbs, headache, and nervous manifestations such as mental depression, excessive tendency to sweating, disordered action of the heart, mild degree of anemia, and some loss of weight. Damp weather produces exacerbation of the pains in the late stages of the disease. The infection, in some cases, is very persistent, and acute febrile relapses may occur after months of quiescence.

Prodromal symptoms in the cases of gradual onset have been noted in the following order of frequency: Pain in the head, pain all over, weakness, pain in the legs, malaise, and dyspnœa. The prodromal period lasts for two days or longer, the severity of the symptoms gradually increasing during the first few days. In a relapse the symptoms are often more severe than in the initial attack.

The headache associated with trench fever is usually frontal in character and behind the eyes, but may be bitemporal or occipital. It is most severe, persistent, commonly recurrent, and is not associated with tenderness of the scalp. When occipital it is often accompanied by stiffness in the back of the neck. The pain in the limbs is either (a) dull aching or gnawing, more or less continuous, always worse at night, or (b) acute pain, shooting or stabbing in character, which may last many hours, especially at night. The pain is nearly always felt in the bones and most frequently in the tibia.

After a few days the general pains subside and localized pain becomes prominent. This is usually symmetrical, varying from day to day. The joints may be painful and stiff, but there is no swelling. Sometimes the pain in the right iliac region is so severe as to give rise to the diagnosis of appendicitis. The spleen is palpable two fingers breadth below the costal margin. In a number of the cases there is alternately shivering and sweating, which occurs several times in the course of a single day or night. Another symptom is frequent micturition, not painful but associated with a great increase of urine. Polyuria occurs as the temperature falls; the pulse is slow; affections of the respiratory tract are usually conspicuous by their absence. Areas of tenderness are frequently associated with the pains and may involve all the structures from the skin down. During an acute attack the patient's general condition obviously deteriorates and he presents an appearance of exhaustion. In addition to this he becomes anemic and steadily loses weight.

For a period varying from a few days to about a fortnight from the onset of the disease the acuteness of the patient's pain persists, especially in portions of his limbs; and walking increases the pain. If a recurrence set in, even though quite late, the recurrence may be more severe than the original attack.

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Two clinical types have been observed. In one there is a short evanescent fever lasting from a few days to a week and frequently followed after a few days of apyrexia by a single short relapse. In the other there is a series of febrile relapses, interrupted by periods of apyrexia.

Pathological Changes.

Although the mode of transmission has now been well established, the causative organism remains to be found. So far as the blood is concerned, there is evidence of abnormal activity of bone marrow. A moderate and rapidly varying leucocytosis precedes and accompanies the fever waves. In afebrile intervals the mononuclear elements are relatively increased. The urine usually shows a trace of albumin; a true nephritis, however, is rare. With the fall of temperature the amount of urine increases.

Differential Diagnosis.

The most important disease from which trench fever must be differentiated is influenza. The two diseases have in common the sudden onset, with fever and generalized pains. In trench fever the prostration, however, is usually less than it is in influenza, and there are no signs of inflammation of the respiratory tract, while in influenza the shin pains and relapsing type of fever are absent.

Prognosis.

About 90 per cent of all cases respond quickly to the ordinary symptomatic treatment and return to duty in a few weeks. In the remaining 10 per cent the disease pursues a more obstinate course and the average duration of disability is from five to six months. In the chronic cases the patient's weight is the best guide to prognosis. As recovery takes place the weight steadily increases.

Sequelæ.

Chief among the sequelæ of trench fever are disordered action of the heart (the so-called irritable heart of soldiers), neurasthenia, and myalgia or "rheumatism."

The first-mentioned is characterized by breathlessness on exertion, palpitation of the heart, pain over the precordium, and giddiness. Although the heart is not enlarged and the sounds are normal, the patient is markedly exhausted. The condition ultimately may lead to neurasthenia.

The clinical phenomena of disordered action of the heart embrace profuse sweating, flushing, headache, throbbing of the vessels of the neck, tremulousness, and, in some cases, discomfort in the throat and chest. These phenomena have been attributed to hyperthyroidism;

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but the administration of thyroid extract by no means tends to exaggerate the symptoms of disordered action of the heart; on the contrary it causes definite relief.

The Transmission of Trench Fever: Summary of Evidence From Experimental Work.

1. The whole blood from febrile cases of trench fever up to the 51st day of the disease, when injected intravenously, is capable of producing the disease. The incubation period in such infections varies greatly—from 5 to 20 days.

2. The virus as contained in the circulating blood is destroyed by the addition of distilled water in large quantities.

3. The bites alone of infective lice appear not to produce trench fever.

4. The excreta of infective lice when applied to a broken surface of skin do readily produce trench fever. The incubation period of such infections is fairly constant and averages 8 days.

5. The excreta passed by lice fed on trench fever patients are not infective until the expiration of not less than 7 days from the commencement of the feeding on trench fever blood, thus indicating either a developmental cycle in the louse or a period during which the organism multiplies.

6. Once lice are infective they remain so until at least the 23d day from the date of their infection.

7. The virus of trench fever, as contained in infected louse excreta, is capable of withstanding drying at room temperature, exposure to sunlight, keeping for not less than 16 days, and heating to 56° C. for 20 minutes.

8. A temperature of 80° C. for 10 minutes destroys the virus—a fact which indicates that it is not a spore-bearing organism.

9. The bodies of infected lice when crushed on the broken skin are capable of producing trench fever.

10. Active trench fever blood equivalent to the content of 11 lice does not produce trench fever when rubbed into the broken skin.

11. Infection probably does not take place by the mouth or inhalation.

12. The excreta of lice are not normally capable of producing trench fever.

13. Trench fever infected lice do not transmit the disease to their offspring.

14. Some attacks of trench fever may be afebrile throughout.

15. The percentage of individuals naturally immune to trench fever is exceedingly small.

16. Old age is no bar to infection.

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17. Such immunity as results from an attack of trench fever is not permanent and may persist only so long as the individual shows evidence of the disease.

18. Even as late as the 79th day of the disease a patient's blood may remain infective and be capable of infecting lice fed on such a patient while febrile.

19. The different varieties of trench fever result from differences in persons infected rather than from differences in the sources of infection.

Prophylaxis.

From what has been said it is clear that prophylactic measures must concern themselves chiefly with the delousing of infested persons. In addition to this, the application to the underclothing of a mixture compound of crude naphthalene, 4 parts, and soft soap, 1 part, is recommended.

Lousy clothing should be disinfested by heat or other effective procedure. Billets, dugouts, and like places should be fumigated with sulphur dioxid or hydrocyanic acid gas in order to kill the lice.

Treatment.

Rest, combined with moderate exercise, and thyroid therapy (not specific treatment) reduces the incidence of disordered action of the heart, provided the treatment is begun early enough. Aside from this, the treatment is purely symptomatic.

LETHARGIC ENCEPHALITIS.

Following the announcement in the Public Health Reports for February 21 concerning the reported prevalence of so-called "lethargic encephalitis" in various parts of Europe, it was perhaps to be expected that cases of this disease would shortly be reported from various parts of this country. Such, indeed, has been the case. In general, the diagnosis appears to have been based largely on the condition of stupor and there is, of course, no means whatever of determining whether or not the cases reported are identical with those observed in Europe. From the meager information at present available, a considerable number appear to have followed an attack of influenza, but this is hardly surprising in view of the widespread prevalence of that disease during the past six months.

As a matter of record, and without thereby expressing any opinion as to the nature of the condition termed "encephalitis lethargica," we give herewith a summary of the cases officially notified to the Public Health Service.

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Locality.	Period.	Cases.	Deaths.
Alabama:			
Montgomery	Week ended Mar. 29	1	
Connecticut:			
New Britain	Week ended Mar. 22	1	
Georgia:			
Brunswick	Week ended Mar 29	1	
Macon	Mar. 27	1	
Souther Field	Week ended Mar 22	1	
Illinois:			
Alton	Week ended Mar. 15	1	
Breese	do	1	
Cairo	Week ended Mar. 22	1	
Chicago	Week ended Mar 15	28	
Do	Week ended Mar 22	17	
Do	Week ended Mar. 29	4	
Evanston	Week ended Mar. 15	3	
Glencoe	do	1	
Harvey	Week ended Mar. 29	1	
Kansas	Week ended Mar. 22	1	
Marseilles	Week ended Mar. 15	1	
Martinsville	do	1	
Middletown	Week ended Mar. 22	2	
Do	Week ended Mar. 29	1	
North Chicago	do	1	
Olney	Week ended Mar. 15	1	
Paxton	do	1	
Quincy	do	1	
Do	Week ended Mar. 22	1	
Springfield	Week ended Mar. 15	1	
Tullula	do	1	
Wilmette	do	2	
Bowling Township (Brown County)	Week ended Mar. 22	1	
Dorchester Township (Macoupin County)	do	1	
Versailles Township (Brown County)	Week ended Mar. 15	1	
Iowa:			
Des Moines	Mar. 11		1
State at large	do	1	
Kentucky:			
Louisville	Mar. 25	1	
Louisiana:			
Caddo Parish	To Mar. 29	1	
Grant Parish	do	1	
Iberia Parish	do	1	
Lafourche Parish	do	1	
Livingston Parish	do	1	
Orleans Parish	do	3	
Richland Parish	do	2	
St. Martin Parish	do	1	
Tangipahoa Parish	do	2	
Massachusetts:			
Boston	Week ended Mar. 22	1	1
Brockton	Week ended Mar. 15		1
New Hampshire:			
Berlin	Mar. 25	1	
New Jersey:			
Jersey City	Week ended Mar. 29	1	
New York.	To Mar 27	15-20	
Albany	do	25-30	
New York	do	16	6
Ogdensburg	do	4	
North Carolina	To Mar. 29	9	
Wilmington Civil Sanitary District	Week ended Mar. 22	1	
Brunswick County	Mar. 23	1	1
Ohio:			
Sandusky	Mar. 22		1
South Carolina:			
Charleston	Mar. 20	1	
Johnsonville (Williamsburg County)	Week ended Mar. 15	1	
Latta (Dillon County)	do	1	
Tennessee:			
Memphis	Mar. 24	4	1
Texas:			
Galveston	To Mar. 29	2	1
Virginia:			
Imported from North Carolina	Mar. 1-15	2	
Petersburg	do	2	
Richmond	Week ended Mar. 15	2	2
Accomac County	Week ended Mar. 22	1	
Albemarle County	do	4	
Amelia County	do	1	
Do	Mar. 1-15	1	
Augusta County	Week ended Mar. 22	1	
Dinwiddie County	do	1	
Fluvanna County	Mar. 1-15	1	
Franklin County	Week ended Mar. 22	1	
Halifax County	do	1	

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Locality.	Period.	Cases.	Deaths.
Virginia—Continued.			
Lee County	Mar. 1-15	1	
Loudoun County	Week ended Mar. 22	1	
Mecklenburg County	Mar. 1-15	1	
Middlesex County	do	1	
Norfolk County	Week ended Mar. 22	1	
Nottoway County	Mar. 1-15	1	
Suffolk	do	1	

MAKE LETHARGIC ENCEPHALITIS REPORTABLE.

Following the publication in a recent number of the Public Health Reports of the statement that lethargic encephalitis had been made a reportable disease in England, a number of State health officers have inquired whether such a procedure might not be desirable in this country. Despite the uncertainty which still prevails as to the nature of so-called "lethargic encephalitis," the Public Health Service believes that much valuable information can be obtained by requiring physicians to report all cases suspected of being this condition.

The State of California has already taken the lead in this matter and has included lethargic encephalitis among the reportable diseases.

THIRD WAVE OF INFLUENZA HITS ENGLAND.

According to official advices from England there has been another recrudescence of influenza in many parts of that country, so that the disease continues to be a matter of grave concern to the sanitary authorities.

Two well-marked waves of influenza have swept over England in the past few months and the country is now in the midst of a third. That the condition is serious is shown by the following official table, which gives the number of deaths from influenza in 96 large cities in England and Wales, each of which had a population of 50,000 or over at the census of 1911. The total population is thus estimated as somewhat over sixteen and one-half millions in 1918. Newspaper cable advices dated March 28 indicate that this third wave has continued with great severity.

Deaths from influenza in 96 large cities of England and Wales, Dec. 1, 1918, to Mar. 1, 1919, by weeks.

Week ended—	Number of deaths.	Week ended—	Number of deaths.
1918.		1919.	
Dec. 7	3,574	Jan. 18	224
Dec. 14	1,835	Jan. 25	224
Dec. 21	1,015	Feb. 1	272
Dec. 28	581	Feb. 8	603
1919.		Feb. 15	1,364
Jan. 4	442	Feb. 22	3,054
Jan. 11	379	Mar. 1	3,389

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Week ended—	Number of deaths.	Week ended—	Number of deaths.
1918.		1919.	
Sept. 14	286	Jan. 4	3,098
Sept. 21	586	Jan. 11	3,230
Sept. 28	1,671	Jan. 18	3,569
Oct. 5	4,530	Jan. 25	3,664
Oct. 12	10,644	Feb. 1	3,212
Oct. 19	18,988	Feb. 8	2,531
Oct. 26	19,183	Feb. 15	2,303
Nov 2	13,877	Feb. 22	2,317
Nov 9	7,830	Mar. 1	2,382
Nov 16	4,548	Mar. 8	2,335
Nov 23	3,116	Mar. 15	2,304
Nov 30	2,767	Mar. 22	[1] 1,805
Dec 7	3,116		
Dec 14	3,936		
Dec 21	3,926		
Dec 28	3,462		

[1] Data incomplete.

SUMMARY OF FEBRUARY REPORT OF THE DIVISION OF VENEREAL DISEASES, PUBLIC HEALTH SERVICE.

Some States and the District of Columbia have not complied with the provisions of the Chamberlain-Kahn Act by making the appropriation necessary to qualify them as beneficiaries under this act. The following is a list of those not qualifying and the appropriations required of them in order that they shall receive an equal amount from the Federal appropriation:

District of Columbia	$3,599.66
Missouri	35,607.91
New Mexico	3,558.70
Pennsylvania	33,341.55
Tennessee	23,754.87

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Reports to date show that legislation bearing on venereal disease control has been introduced in the following States:

Alabama.	Minnesota.	Rhode Island.
Arizona.	Missouri.	South Carolina.
Arkansas.	Nebraska.	Tennessee.
California.	Nevada.	Utah.
Connecticut.	New Jersey.	Vermont.
Delaware.	New York.	Washington.
Idaho.	North Carolina.	Maine.
Iowa.	Ohio.	New Hampshire.
Kansas.	North Dakota.	New Mexico.
Massachusetts.	Oklahoma.	Wisconsin.
Michigan.	Oregon.	Wyoming.

The following bills have been passed:

North Carolina: Vice repressive act, injunction and abatement act, venereal disease act.

A'abama: Injunction and abatement act, ouster law, venereal disease bar to marriage, State board of control.

Oregon: Venereal disease control act.

Oklahoma: Venereal disease control act.

South Carolina: Venereal disease control act.

New York: Venereal disease control act.

Arizona: State board of control.

Appropriation bills have been passed by the State legislatures of the following States, which makes these States eligible during the next fiscal year for their share of the Federal appropriation:

North Dakota	$12,548.48
Oregon	25,000.00
South Carolina	10,000.00
Wisconsin	50,000.00
Wyoming	4,000.00
West Virginia	7,000.00

Excerpts From Report of Educational Activities, February, 1919.

Requests for publications received from health officers, physicians, hospitals, nurses, civic organizations, city officials, libraries, churches, editors, Y. M. C. A.'s, educators, and the like	16,718
Publications distributed	793,454
Publications purchased or reprinted by State boards of health	473,800
Number of lectures, exhibitions of films, addresses, and conferences (reports from the field not complete)	223
Number of articles published in magazines	5
Additional pledges of cooperation received from druggists	2,896
Additional pledges of cooperation received from physicians	40,000
Number of ministers agreeing during the month to cooperate in the Government's program in combating venereal diseases	11,821
Number of States equipped with full sets of venereal disease pamphlets	31

The accompanying table covers the activities of only 48 clinics (including 27 detention homes in direct cooperation with the clinics, and 1 training school for girls) operated by, or in cooperation with,

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Houston, Tex.[1]	862	680	182	17	74	16	2	.....	715	38	111.5	22
Indianapolis, Ind	297	210	87	20	8	10	37	1	216	5	66.1	16
Ithaca, N. Y	25	.....	25	.....	.....	.....	.....	.....	25	.....	.....	.....
Johnstown, N. Y	5	.....	5	.....	5	.....	.....	.....	.....	.....	2.0	.....
Kansas City, Mo	63	.....	63	.....	.....	.....	.....	.....	63	.....	9.5	24
Laurel, Miss	8	5	3	.....	.....	.....	1	1	4	2	.6	26
Leavenworth, Kans	421	366	55	.....	65	14	30	.....	95	217	105.4	28
Los Angeles, Calif.:												
No. 1	78	48	30	.....	.....	.....	.....	.....	78	.....	8.6	24
No. 2	310	238	72	.....	17	8	.....	.....	285	.....	.....	.....
Louisville, Ky.[1]	1,503	1,091	412	.....	4	227	119	.....	959	194	197.8	26
Macon, Ga.[1]	344	226	118	3	26	27	51	.....	228	9	33.4	23
Miami, Fla	31	8	23	.....	1	5	2	.....	20	3	2.9	24
Montgomery, Ala.[1]	523	438	85	3	.....	7	7	.....	489	17	67.4	23
Newport News, Va.[1]	724	411	313	.....	22	17	129	1	502	53	53.7	24
Niagara Falls, N. Y	9	1	8	.....	.....	4	.....	.....	5	.....	2.4	8
Norfolk, Va.[1]	270	168	102	2	86	13	12	.....	138	19	41.8	23
Pasadena, Calif	10	.....	10	.....	.....	.....	.....	.....	10	.....	1.6	16
Pawtucket, R. I	36	26	10	.....	.....	3	.....	.....	33	.....	9.5	11
Providence, R. I.:												
No. 1	630	579	51	.....	.....	30	8	1	589	2	27.8	24
No. 2	78	42	36	.....	.....	.....	.....	.....	78	.....	5.4	23
Rome, N. Y	19	17	2	.....	.....	.....	.....	.....	19	.....	4.9	8
San Antonio, Tex.[1]	576	413	163	1	78	85	39	.....	353	20	40.3	22
San Francisco, Calif.:												
No. 1	256	188	68	.....	4	4	34	1	212	1	24.8	24
No. 2	20	.....	20	6	.....	.....	.....	.....	.....	14	.....	.....
No. 3	115	81	34	.....	.....	19	.....	.....	96	.....	47.8	24
Santa Barbara, Calif	17	.....	17	.....	.....	.....	.....	.....	17	.....	3.3	6
Hattiesburg, Miss	114	87	27	8	2	6	13	.....	74	11	18.3	22
Savannah, Ga	468	361	107	.....	.....	14	.....	.....	454	.....	27	6
Spartanburg, S. C.[1]	110	87	23	.....	15	.....	8	.....	56	31	40.5	24
Stockton, Calif	21	.....	21	.....	1	7	.....	.....	13	.....	3.4	26
Troy, N. Y	31	12	19	2	11	3	1	.....	14	.....	5.0	14
Utica, N. Y	17	12	15	1	.....	4	36	.....	12	.....	13.2	4
	12,884	9,741	3,143	100	643	762	742	8	9,740	889	32.7	884

[1] Extra-cantonment zone clinic.

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DRUGGISTS COOPERATE IN VENEREAL DISEASE CONTROL WORK.

Some time ago the Division of Venereal Diseases of the Public Health Service circularized druggists with literature and pledge cards. Druggists were asked to sign a card on which the following pledges appear:

"1. Not to prescribe or recommend any remedy for a venereal disease.

"2. After this date, not to purchase a proprietary remedy to be sold to the public for the self-treatment of a venereal disease, and not to sell any such remedy after January 15, 1919.

"3. To refill only such prescriptions for the treatment of venereal disease as were given originally to the customer by a reputable physician who is still in charge of the case.

"4. To cause literature furnished by the Surgeon General to be handed to every person asking, without a physician's prescription, for a remedy customarily confined to the treatment of a venereal disease. Further, to direct the applicant to a reputable physician, to a board of health, or to an approved venereal clinic."

The cards were sent to 48,500 retail druggists and 26,049 of the druggists (over 50 per cent) returned their pledge cards properly signed. These signed cards have been sent to the State health officers for their information and in order that they may supply the druggists with the literature mentioned in paragraph 4 of the pledge cards. The campaign among druggists is now in the state of attempting to enlist those members of the trade who failed to sign the first request of the Public Health Service. Retail druggists are now receiving through the mails a copy of the special bulletin, "Responsibility of Druggists for the Public Health," designed to impress upon the members of the trade the fact that they occupy a peculiar position in their relationship to the communities they serve. Druggists and drug clerks should consider it their imperative duty to cooperate in the venereal-disease control program.

DEATHS DURING WEEK ENDED MARCH 22, 1919, IN CITIES.

The following table shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined in certain large cities of the United States during the week ended March 22, 1919. The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown.

The data are taken from the "Weekly Health Index," March 25, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.

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Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended Mar. 22, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding year.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	56	25.9	C 20.8	27	12.5
Atlanta, Ga.	201,732	57	14.7	C 13.2	.....	.....
Baltimore, Md.	[2] 669,981	219	17.0	A 21.0	.....	.....
Birmingham, Ala.	197,670	52	13.7	A 17.2	.....	.....
Boston, Mass.	785,245	228	15.1	A 18.3	43	2.8
Buffalo, N. Y.	473,229	163	18.0	C 15.9	20	2.2
Cambridge, Mass.	111,432	38	17.8	A 15.6	8	3.7
Chicago, Ill.	2,596,681	803	16.1	A 17.3	.....	.....
Cincinnati, Ohio.	418,022	220	27.4	C 20.0	109	13.5
Cleveland, Ohio.	810,306	281	18.1	C 13.5	134	8.6
Columbus, Ohio.	225,293	98	22.7	C 18.3	49	11.3
Dayton, Ohio.	130,655	54	21.6	C 14.4	17	6.8
Denver, Colo.	.....	88	.....	.....	.....	.....
Fall River, Mass.	128,392	37	15.0	C 21.9	11	4.5
Grand Rapids, Mich.	135,450	43	16.6	C 15.8	.....	.....
Indianapolis, Ind.	289,577	145	26.1	C 16.2	.....	.....
Jersey City, N. J.	318,770	136	22.2	C 22.4	.....	.....
Kansas City, Mo.	313,785	154	25.6	C 24.6	39	6.5
Los Angeles, Calif.	508,495	173	15.9	A 14.3	19	1.7
Louisville, Ky.	242,707	179	38.5	C 21.1	87	18.7
Lowell, Mass.	109,081	40	19.1	A 18.7	4	2.0
Memphis, Tenn.	154,759	111	37.4	C 20.2	24	8.1
Milwaukee, Wis.	453,481	130	14.9	A 15.0	19	2.2
Minneapolis, Minn.	383,442	125	17.0	C 12.8	.....	.....
Nashville, Tenn.	119,215	56	24.5	C 24.5	22	9.6
Newark, N. J.	428,684	147	17.9	C 21.3	42	5.1
New Haven, Conn.	154,905	42	14.1	C 18.9	10	3.4
New Orleans, La.	382,273	136	18.6	A 22.0	18	2.5
New York, N. Y.	5,215,879	1,815	18.1	C 22.5	544	5.4
Oakland, Calif.	214,206	44	10.7	A 12.3	.....	.....
Omaha, Nebr.	180,264	52	15.0	C 13.9	.....	.....
Philadelphia, Pa.	1,761,371	611	18.1	[3] 18.1	154	4.5
Pittsburgh, Pa.	593,303	259	22.8	C 20.0	114	9.9
Portland, Oreg.	.....	73	.....	.....	18	.....
Providence, R. I.	263,613	79	15.6	C 17.2	12	2.4
Richmond, Va.	160,719	58	18.8	C 17.2	11	3.6
Rochester, N. Y.	264,856	93	18.3	C 15.2	19	3.7
St. Louis, Mo.	779,951	309	20.7	C 16.8	119	8
San Francisco, Calif.	478,530	148	16.1	C 19.1	13	1.4
Seattle, Wash.	.....	50	.....	.....	5	.....
Spokane, Wash.	.....	32	.....	.....	.....	.....
Syracuse, N. Y.	161,404	52	16.8	C 14.9	5	1.6
Toledo, Ohio.	262,234	105	20.9	A 14.5	30	6.0
Washington, D. C.	401,081	152	19.7	A 19.3	29	3.8
Worcester, Mass.	173,650	71	21.3	C 14.4	13	3.9

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

NARCOTIC DRUGS—INTERPRETATION OF HARRISON ACT.

COURT DECIDES THAT PHYSICIAN WHO GIVES PRESCRIPTION DISPENSES THE DRUG.

In construing the Harrison antinarcotic act[1] the United States district court for the western district of Pennsylvania has decided[2] that a person charged with dispensing narcotic drugs in violation of the act can not escape punishment by setting up the plea that he was not the owner of the drugs dispensed.

[1] Reprint 338 from the Pub. Health Repts., p. 589.
[2] United States v. Jin Fuey Moy, 253 Federal Reporter, 213.

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Section 2 of the Harrison act makes it unlawful to "sell, barter, exchange, or give away," with certain exceptions, any of the drugs mentioned in section 1 of the act. The defendant, a physician, was charged with unlawfully dispensing drugs not in the course of his professional practice. The evidence showed that he had issued a great many prescriptions for the drugs, but he contended that he had committed no offense, because the words "sell, barter, exchange, or give away" could only apply to owners of the drugs.

In rejecting this contention the court said:

It is insisted that to dispense or distribute the drugs on a prescription is not to sell, barter, exchange, or give them away. It is held in United States *v.* Stowell (133 U. S. 1, 10 Sup. Ct. 244, 33 L. Ed. 555) that statutes enacted to prevent frauds upon the revenue are considered as enacted for the public good and to suppress a public wrong, and, therefore, although they may impose penalties or forfeitures, are to be fairly and reasonably construed so as to carry out the intention of the legislature. It could hardly be said that words of so broad import as "sell, barter, exchange, or give away," when standing together, were intended by Congress to be so narrowly and strictly construed as to include only those cases where title to the prescribed drug was in him who undertook to dispense or distribute it. The lawmakers were not concerned with the ownership of the drug, but with its unlawful distribution. It could matter nothing to the poor victim in the fatal clutches of the drug habit where title was to the narcotic which was thus dispensed to him, every grain of which brought him nearer to the grave. Whether the victim procured the drug from the hand of the physician or through the druggist on an order or prescription of the physician can matter nothing, unless we look blindly at the letter of the act, wholly forgetting its spirit and purpose.

EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

A decided decrease in the number of reported cases of influenza throughout the United States is shown by telegraphic reports for the week ended March 29. (See pp. 696 and 700.)

A recrudescence of the disease is reported in the western part of Kansas, and the number of cases reported in the State of Vermont is slightly greater than for the preceding week. With these exceptions decreases are noted in all States from which reports have been received.

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CHARLESTON SANITARY DISTRICT, S. C.

Charleston:	Cases.
Influenza	1

CAMP DEVENS ZONE, MASS.

Diphtheria:	
Shirley	1
Measles:	
Lancaster	1
Lunenburg	8
Pneumonia:	
Shirley	2
Pneumonia, lobar:	
Ayer	1
Lancaster	1
Scarlet fever:	
Lancaster	1

CAMP DIX ZONE, N. J.

Diphtheria:	
Pemberton Township	1
Measles.	
New Hanover Township	2

FAYETTEVILLE SANITARY DISTRICT, N C.

Chancroid	1
Gonorrhea	4
Measles	30
Pneumonia, broncho	1
Septic sore throat	1
Syphilis	1

CAMP FUNSTON ZONE, KANS.

Cleburne:	
Influenza	13
Junction City:	
Gonorrhea	1
Scarlet fever	4
Manhattan:	
Chicken pox	1
Mumps	4
Pneumonia	1
Scarlet fever	4

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Diphtheria:	Cases.
Bibb City	9
Columbus	1
Gonorrhea:	
Bibb City	3
Columbus	6
Muscogee County	2
Influenza:	
Columbus	2
Muscogee County	1
Phoenix City	1
Measles:	
Columbus	3
Muscogee County	1
Pellagra:	
Columbus	2
Muscogee County	3
Pneumonia:	
Columbus	3
Muscogee County	1
Smallpox:	
Bibb City	1
Columbus	8
Muscogee County	5
Syphilis:	
Columbus	5
Whooping cough:	
Columbus	10
Muscogee County	4

CAMP GORDON ZONE, GA.

Atlanta:	
Cerebrospinal meningitis	1
Chancroid	1
Chicken pox	19
Diphtheria	2
Erysipelas	1
Gonorrhea	35
Influenza	21
Malaria	2
Measles	11

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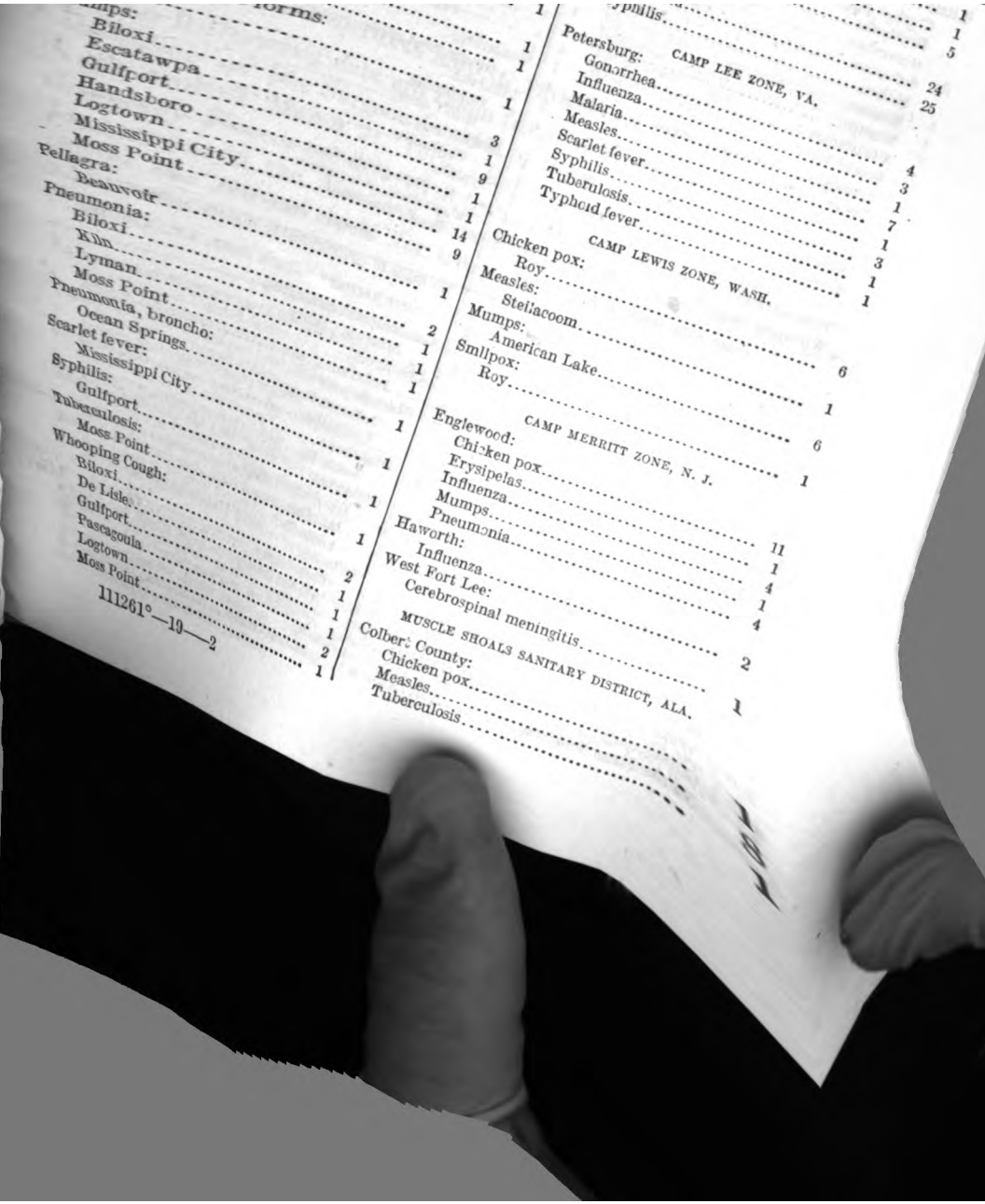

...ms: ... 1
Biloxi ... 1
Escatawpa ... 1
Gulfport ... 1
Handsboro ... 3
Logtown ... 1
Mississippi City ... 9
Moss Point ... 1
Pellagra:
Beauvoir ... 1
Pneumonia:
Biloxi ... 14
Kiln ... 9
Lyman ... 1
Moss Point ... 2
Pneumonia, broncho:
Ocean Springs ... 1
Scarlet fever:
Mississippi City ... 1
Syphilis:
Gulfport ... 1
Tuberculosis:
Moss Point ... 1
Whooping Cough:
Biloxi ... 1
De Lisle ... 2
Gulfport ... 1
Pascagoula ... 1
Logtown ... 1
Moss Point ... 2
... 1

...yphilis ... 1
... 1
... 5

Petersburg: CAMP LEE ZONE, VA.
Gonorrhea ... 24
Influenza ... 25
Malaria
Measles ... 4
Scarlet fever ... 3
Syphilis ... 1
Tuberculosis ... 7
Typhoid fever ... 1
... 3
... 1
... 1

CAMP LEWIS ZONE, WASH.
Chicken pox:
Roy ... 6
Measles:
Steilacoom ... 1
Mumps:
American Lake ... 6
Smallpox:
Roy ... 1

CAMP MERRITT ZONE, N. J.
Englewood:
Chicken pox ... 11
Erysipelas ... 1
Influenza ... 4
Mumps ... 1
Pneumonia ... 4
Haworth:
Influenza ... 2
West Fort Lee:
Cerebrospinal meningitis ... 1

MUSCLE SHOALS SANITARY DISTRICT, ALA.
Colbert County:
Chicken pox
Measles
Tuberculosis

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Measles	1
Mumps	4
Pneumonia	5
Scarlet fever	7
Syphilis	4
Tuberculosis	3
Typhoid fever	1
North Little Rock:	
Influenza	1
Mumps	1
Pneumonia	2
Typhoid fever	1
Whooping cough	2

CAMP POLK ZONE, N. C.

Chicken pox:	
Durham	1
Raleigh	2
Diphtheria:	
Middle Creek Township	1
Measles:	
Durham	3
Raleigh	2
Mumps:	
Durham	14
Raleigh	1
Smallpox:	
Durham	3
Syphilis:	
Durham	3
Tuberculosis:	
Durham	1
Raleigh	1
Wake Forest Township	1
Whooping cough:	
Wake Forest Township	5
Syphilis	18

CAMP SHERMAN ZONE, OHIO.

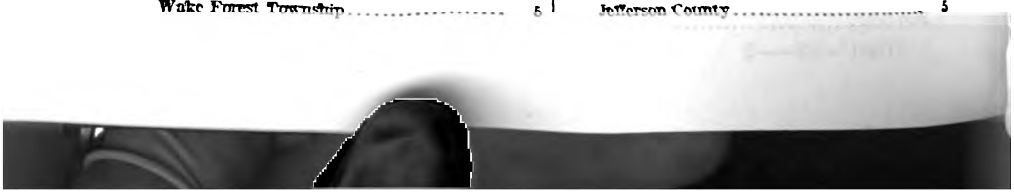
Gonorrhea:	
Government clinic	7
Influenza:	
Chillicothe	8
Ross County	7
Scarlet fever:	
Chillicothe	1
Syphilis:	
Government clinic	3
Tuberculosis, pulmonary:	
Scioto Township	1

SOUTHER FIELD ZONE, GA.

No cases of communicable disease reported.

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Cerebrospinal meningitis:	
Jefferson County	1
Chancroid:	
Jail clinic	1
Chicken pox:	
Jefferson County	1
Louisville	5
Diphtheria:	
Louisville	3
Gonorrhea:	
Government clinic	20
Jail clinic	4
Louisville	1
Influenza:	
Clark County	3
Jefferson County	129
Louisville	60
Measles:	
Jefferson County	5



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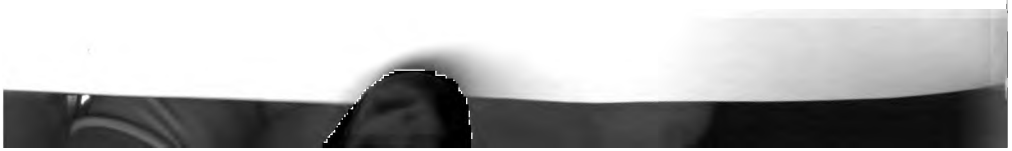
Lee	2			15	4	1					
Lewis	1			24	4	8	2		2	1,458.21	92.
Logan	3			2	1					2,007.72	38.
McClellan				1						835.11	34.
Meade				31	2	1			1	704.02	96.
Pike	1		1	25					1	1,632.60	123.
Sevier	1			6		1				506.88	9.
Shelby	1			21	8			1		2,101.65	73.
Sherman				13		15			2	1,581.68	112.
Taylor	8			9	5	7		1	2	779.82	112.
Travis	11		2	20		4	1			947.21	92.
Upton	1			21	1	3	5			1,314.76	61.
Wheeler										51.23	1.
N. E. Dept				1	1	2			1	682.18	28.
Eastern Dept	4			30	11	3			2	773.20	21.
S. E. Dept				42	4	1	1			1,144.76	27.
Central Dept				2		3	1		5	1,053.44	31.
Southern Dept	8			55	6	31			2	931.73	51.
Western Dept	1		1	12	7	13			2	654.51	15.
Aviation camps	3		3	27		11		1	1	812.60	34.
Ports of embarkation:											
Hoboken	13			16	3	79	4	1		672.59	61.
Newport News	7			60	8	20	27	4	5	3,164.98	106.
Alcatraz, D. B										325.00	15.
Leavenworth, D. B	3							1	1	1,525.03	46.
Columbus Brks				1						835.34	58.
Jefferson Brks	1			4	4	20				4,409.06	157.
Fort Logan										1,153.41	57.
Fort McDowell										927.06	34.
Fort Sill				10	10	2	1		1	923.79	54.
Fort Slocum						2				228.07	25.
Fort Thomas				2	2					1,495.20	60.
West Point										724.63	21.
Arsenals				19						659.56	32.
Miscellaneous small stations	3			11		2				766.35	29.
Total	106	1	10	701	137	250	64	11	38	1,064.57	58.



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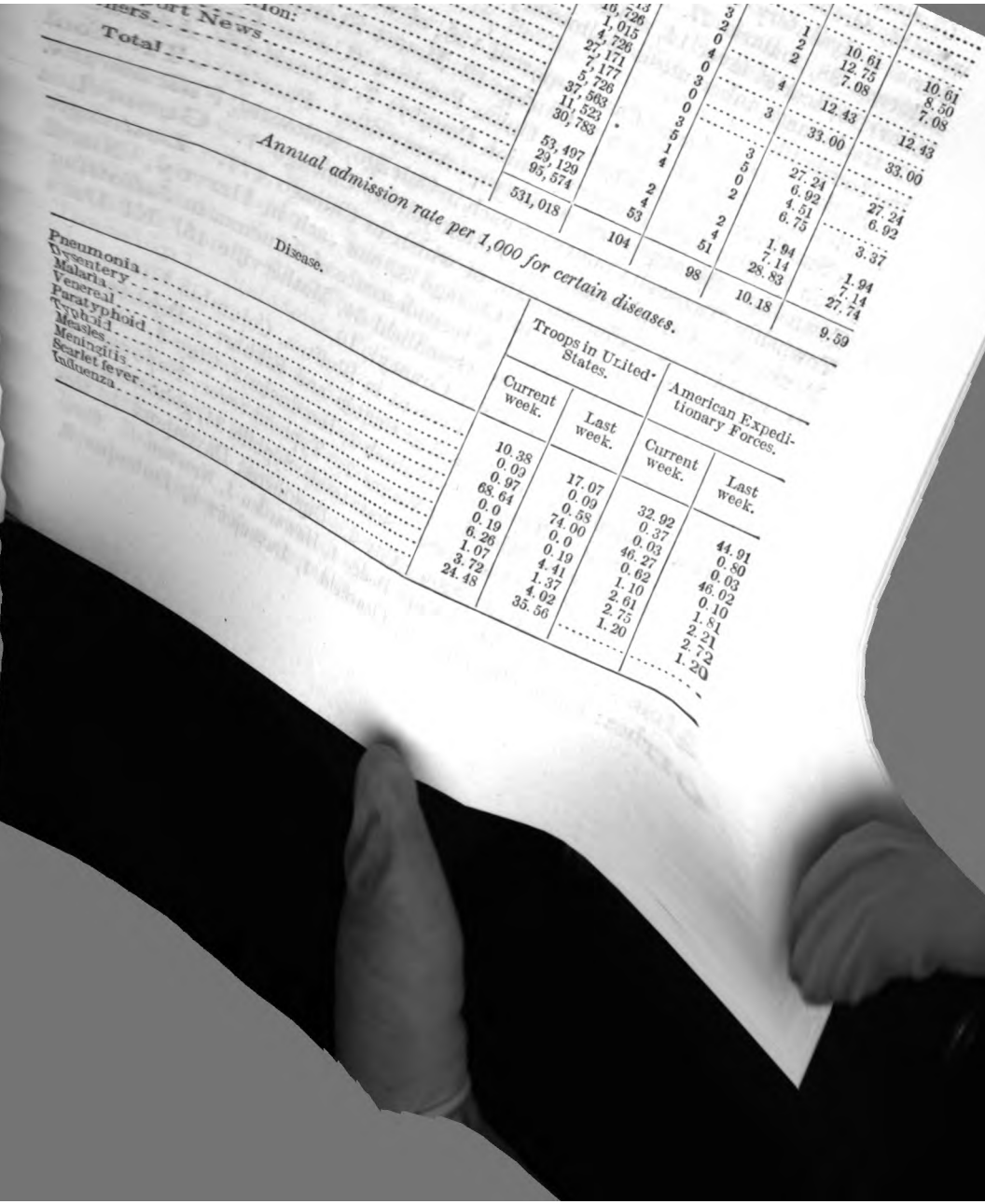

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	10.38	17.07	32.92	44.91
Dysentery	0.09	0.09	0.37	0.50
Malaria	0.97	0.58	0.03	0.03
Venereal	68.64	74.00	46.27	46.02
Paratyphoid	0.0	0.0	0.62	0.10
Typhoid	0.19	0.19	1.10	1.81
Measles	6.26	4.41	2.61	2.21
Meningitis	1.07	1.37	2.75	2.72
Scarlet fever	3.72	4.02	1.20	1.20
Influenza	24.48	35.56		

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CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended March 29, 1919.

Alabama.—The State reports no unusual prevalence.

Arkansas.—State totals: Influenza 31, pellagra 42, smallpox 33, measles 22, malaria 20, chicken pox 15, tuberculosis 11, diphtheria 5, typhoid 1, scarlet fever 3.

California.—Influenza cases reported 319. Smallpox: 28 cases of which in Long Beach 2, Chico 8, Sutter County 2, Marysville 5, Eureka 7, balance scattered over State. Five cases typhoid reported. Cerebrospinal meningitis: 2 cases of which 1 in San Benito County and 1 in Long Beach. This does not include Los Angeles or San Francisco, from which cities reports have not been received.

Connecticut.—Cerebrospinal meningitis, New Haven 1; trachoma, New Haven 1; influenza, State total 135.

Florida.—Typhoid fever, Miami City 1, Jacksonville 2, Tampa 1, Palm Beach County 1; malaria, Jacksonville 1, Gadsden County 3, Palm Beach County 1.

Georgia.—State totals: Acute infectious conjunctivitis 1, hookworm 3, cerebrospinal meningitis 1, chicken pox 30, dengue 1, diphtheria 4, dysentery (bacillary) 2, German measles 1, gonorrhea 98, influenza 88, malaria 27, measles 51, mumps 35, pneumonia (acute lobar) 15, scarlet fever 14, septic sore throat 7, smallpox 87, syphilis 32, trachoma 2, tuberculosis (pulmonary) 15, typhoid fever 8, whooping cough 13.

Illinois.—Diphtheria: Cases reported 128, of which in Chicago 91, scarlet fever 107, of which in Chicago 63, Mount Sterling 8, Oglesby 5. Smallpox 140, of which in Union Precinct (Union County) 45, Pekin 8, Alto Pass Precinct (Union County) 7, 6 each in Audubon Township (Montgomery County), Averyville, Peoria, Tremont Township (Tazewell County), 5 each in Chicago, Nokomis, Fairmount. Meningitis, Camp Grant 2. Poliomyelitis, Chicago 1. Gonorrhea 64, syphilis 38, influenza 635, of which in Chicago 177. Lethargic encephalitis 6, of which in Chicago 3, one each in Harvey, North Chicago, and Middletown. A recrudescence of influenza in following communities: Altamont 39, Greenfield 54, Matherville 15, El Dara 70, Bement Township (Piatt County), 10.

Indiana.—Scarlet fever: Present in Bluffton, Columbia City, and Attica. Smallpox: Reported at Clinton and Elkhart. Diphtheria: Knox County 1, Tipton 1, Wabash 2, Hendricks 3, Clay 3, Clinton 1, Tippecanoe 3, Miami 3, Wayne 2. Typhoid fever: Reported in Tipton and Starke Counties. State totals: Syphilis 34, gonorrhea 42.

Iowa.—Chancroid: Sioux City 2. Diphtheria: Davenport 1, Des Moines 1, Dubuque 2, Fort Dodge 1, Hawarden 1, Newton 1. Gonorrhea: Cedar Rapids 11, Clearfield 1, Davenport 6, Dubuque 2,

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Keokuk 1, Marshalltown 1, Postville 1, Ringsted 1, Sioux City 6. Mumps: Northwood 18. Scarlet fever: Burlington 1, Davenport 1, Des Moines 8, Dubuque 4, Goodell 1, Humboldt 2, Postville 1, West Bend 1. Smallpox: Bonaparte 1, Boone 3, Cedar Rapids 3, Clarkesville 4, Davenport 25, Des Moines 3, Fort Dodge 8, Newton 1, Ottumwa 2. Syphilis: Cedar Rapids 1, Sioux City 2, Spencer 1. In rural districts of following counties: Diphtheria: Allamakee 1, Boone 1, Warren 1. Measles: Des Moines 1, Johnson 1. Scarlet fever: Buchanan 1, Franklin 2, Ringgold 3, Union 3, Wapello 8, Winneshiek 3. Smallpox: Buchanan 5, Clinton 1, Des Moines 1, Johnson 1, Mills 2, Monoa 1, Montgomery 1, Wapello 1. Ninety-one cases influenza reported.

Kansas.—Meningitis: Independence 1, Leavenworth 1. Smallpox: Atchison 11, Chanute 21, Leavenworth 10, Wichita 23. State totals: Typhoid fever 1, smallpox 91, diphtheria 18, scarlet fever 54, influenza 2,501. Practically all western counties report a third recrudescence of influenza more virulent than previous waves.

Louisiana.—State totals: Lethargic encephalitis 14, influenza 30, cerebrospinal meningitis 1, typhoid 19, smallpox 60, diphtheria 7.

Maine.—Chicken pox: Bath 1, Portland 2, Benton 1. Diphtheria: Bradley 1, Garland 1, Stock 1, Westbrook 1, South Bristol 2, Oldtown 1, Van Buren 1. German measles: Portland 2. Gonorrhea: Ashland 1, Boothbay Harbor 1, Camden 2, Fairfield 1, Freeport 1, Haynesville 1, Herman 1, Monroe 1, Phillips 1, Jonesport 1, Bates 12, Lewiston 2, Portland 16, Belfast 1, Biddeford 1, Columbia Falls 1, Waterville 4, Bangor 1. Measles: Portland 1, Bath 1. Mumps: Bath 2. Scarlet fever: Portland 5, Bangor 4, Hudson 4. Smallpox: Bath 2, Bangor 1, Houlton 6. Syphilis: Lewiston 1, Bangor 1, Portland 14, Waterville 2, Augusta 1, Brunswick 6, Dexter 1, Freeport 1, East Livermore 1. Tuberculosis 11 cases. Typhoid fever: Waterville 2. Influenza: 37 cases.

Massachusetts.—Unusual prevalence. Diphtheria: Lynn 7, Lowell 21, Somerville 9, Waltham 6, Worcester 7, Springfield 6, Greenfield 9. Scarlet fever: Lynn 10, Salem 15, Wakefield 8, Westfield 7.

Minnesota.—Smallpox (new foci): Clay County, Moorhead City 1; Houston County, Black Hammer Township 1; Scott County, Jackson Township 1. State totals: Poliomyelitis 1, syphilis 46, gonorrhea 82, chancroid 1.

New Jersey.—Influenza 578, pneumonia 202. Smallpox: Camden city 1. Unusual prevalence scarlet fever in Red Bank.

New York.—Outside of New York City: Typhoid fever 7, measles 284, scarlet fever 191, whooping cough 41, diphtheria 165. Smallpox: Rochester city 2. Cerebrospinal meningitis: Ilion 1. Poliomyelitis: New Baltimore 1. Pneumonia: Cases reported 216. Voluntary reports: Syphilis 157, gonorrhea 26.

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North Carolina.—State totals: Influenza: Cleveland County 128, Gaston County 12, Charlotte City 6, Whooping cough 111, measles 299, diphtheria 18, scarlet fever 7, septic sore throat 2, smallpox 67, chicken pox 33, typhoid fever 5, epidemic meningitis 4, bronchopneumonia 28, lobar pneumonia 19, paratyphoid fever 1, cholera infantum 2, syphilis 72, gonorrhea 116, chancroid 5, gonorrhea and syphilis 8, gonorrhea and chancroid 2, gonorrhea, syphilis, and chancroid 1, lethargic encephalitis cases reported to date 11.

Ohio.—Smallpox continues in Elyria, Dennison, Urichsville, and Miami Valley. Scarlet fever: Franklin Township (Fulton County) 6, Twin Township (Darke County) 7, Cincinnati 33. Diphtheria: Elyria 5. Measles epidemic in Akron. Influenza decreasing.

Oregon.—Influenza: Portland 12 cases (1 death), Benton 17, Clackamas 4, Linn 1.

Vermont.—Fourteen towns report 257 cases influenza. No other unusual prevalence.

Virginia.—Smallpox: King William County 10, Surrey 1, Craig 8, Louisa 2, Middlesex 1, Washington 1, Norfolk 2. Influenza: 29 cases. Cerebrospinal meningitis: Portsmouth 1, Norfolk 1.

Washington.—Mumps: Vancouver 37, Puyallup 3, Tacoma 5, Yakima 30. Smallpox: Brewster 7, Eatonville 1, Tacoma 15, Everett 3, Olympia 8, Yakima 15.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended March 29, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga.	1	Camp Zachary Taylor zone, Ky. and Ind.	1
Camp Merritt zone, N. J.	1	Camp Travis zone, Tex.	1
Portsmouth and Norfolk County health district, Va.	3		

State Reports for February, 1919.

Place.	New cases reported.	Place.	New cases reported.
Iowa:		Pennsylvania:	
Marshall County	1	Butler County	1
Kansas:		Cambria County	1
Doniphan County—		Delaware County	1
Highland	1	Erie County	1
Harvey County—		Mercer County	1
Newton	1	Philadelphia County	12
Phillips County—		Westmoreland County	1
Agra (R. D.)	1	Total	18
Republic County—			
Wayne (R. D.)	1	South Carolina:	
Rush County		Charleston County	2
Otis (R. D.)	1	Clarendon County	1
Sedgwick County—		Greenville County	1
Wichita	1	Richland County	2
Wyandotte County—		Spartanburg County	1
Kansas City	1	York County	1
Total	7	Total	8

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CEREBROSPINAL MENINGITIS—Continued.

City Reports for Week Ended Mar. 15, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1		Nashville, Tenn	2	1
Baltimore, Md	1	2	Newark, N. J	3	2
Beaumont, Tex		1	New Bedford, Mass	1	1
Bedford, Ind		1	New York, N. Y	4	3
Birmingham, Ala	1	1	Omaha, Nebr		1
Boston, Mass	2	3	Peoria, Ill		1
Chicago, Ill	2	3	Pittsburgh, Pa	2	
Dayton, Ohio	1		Portland, Oreg	1	1
Detroit, Mich	3	1	Riverside, Calif	1	
Durham, N. C		1	Rochester, N. Y	1	
Galveston, Tex	1		St. Louis, Mo	1	
Hancock, Mich	2	2	San Antonio, Tex	1	
Highland Park, Mich	1	1	Shenandoah, Pa	1	
Kansas City, Mo	1		Tuscaloosa, Ala	1	
Lancaster, Ohio		1	Washington, D. C		1
Lincoln, Nebr	1		Worcester, Mass	1	
Milwaukee, Wis	3	3			

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	1	Tidewater health district, Va	1
Camp Gordon zone, Ga	1	Camp Zachary Taylor zone, Ky. and Ind	1
Muscle Shoals sanitary district, Ala	18	Camp Travis zone, Tex	4

DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.		Cases.
Camp Devens zone, Mass	1	Portsmouth and Norfolk County health district, Va	2
Camp Dix zone, N. J	1	Tidewater health district, Va	1
Gas and Flame School zone, Ga. and Ala	10	Camp Zachary Taylor zone, Ky. and Ind	8
Camp Gordon zone, Ga	2	Camp Travis zone, Tex	2
Camp Jackson zone, S. C	1	Camp Upton zone, N. Y	6
Muscle Shoals sanitary district, Ala	1		
Camp Polk zone, N. C	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 708.

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	4	Picric acid plant zone, Ga	4
Camp Funston zone, Kans	1	Camp Pike zone, Ark	9
Gas and Flame School zone, Ga. and Ala	11	Portsmouth and Norfolk County health district, Va	2
Camp Gordon zone, Ga	35	Camp Sheridan zone, Ala	8
Gulfport health district, Miss	2	Camp Sherman zone, Ohio	7
Camp A. A. Humphreys zone, Va	2	Camp Zachary Taylor zone, Ky. and Ind	34
Camp Jackson zone, S. C	24	Tidewater health district, Va	55
Camp Lee zone, Va	4	Camp Travis zone, Tex	13
Muscle Shoals sanitary district, Ala	30		

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INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.
Charleston sanitary district, S. C	1
Camp Funston zone, Kans	13
Gas and Flame School zone, Ga. and Ala	4
Camp Gordon zone, Ga	21
Gulfport health district, Miss	9
Camp A. A. Humphreys zone, Va	2
Camp Jackson zone, S. C	1
Camp Lee zone, Va	3
Camp Merritt zone, N. J	6
Muscle Shoals sanitary district, Ala	2
Picric acid plant zone, Ga	4
Camp Pike zone, Ark	2
Portsmouth and Norfolk County health district, Va	2
Camp Sherman zone, Ohio	15
Camp Zachary Taylor zone, Ky. and Ind	28
Tidewater health district, Va	1
Camp Travis zone, Tex	2
Wilmington sanitary district, N. C	1

LEPROSY.

Pennsylvania Report for February, 1919.

During the month of February, 1919, two cases of leprosy were reported in Pittsburgh, and one in Braddock, Allegheny County, Pa.

City Report for Week Ended Mar. 15, 1919.

One case of leprosy was reported at Philadelphia, Pa., during the week ended March 15, 1919.

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.
Camp Gordon zone, Ga	2
Gulfport health district, Miss	24
Camp Lee zone, Va	1
Camp Pike zone, Ark	2

South Carolina Report for February, 1919.

During the month of February, 1919, six cases of malaria were reported in Rochester County, eight in Richland County, and one in York County, S. C.

City Reports for Week Ended Mar. 15, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Independence, Mo	1	.....	Palestine, Tex	3	.....
Jersey City, N. J	1	.....	San Diego, Calif	1	1
Memphis, Tenn	1	.....	Tuscaloosa, Ala	1	.....
New Orleans, La	.....	1			

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases
Camp Devens zone, Mass	9
Camp Dix zone, N. J	2
Fayetteville sanitary district, N. C	30
Gas and Flame School zone, Ga. and Ala	4
Camp Gordon zone, Ga	11
Gulfport health district, Miss	2
Camp A. A. Humphreys zone, Va	1
Camp Jackson zone, S. C	1
Camp Lee zone, Va	7
Camp Lewis zone, Wash	1
Muscle Shoals sanitary district, Ala	9
Picric acid plant zone, Ga	22
Camp Pike zone, Ark	1
Camp Polk zone, N. C	5
Portsmouth and Norfolk County health district, Va	16
Camp Zachary Taylor zone, Ky. and Ind	57
Tidewater health district, Va	8
Camp Travis zone, Tex	5

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 708.

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PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.		Cases.
Gas and Flame School zone, Ga. and Ala	5	Gulfport health district, Miss	1

South Carolina Report for February, 1919.

During the month of February, 1919, one case of pellagra was reported in Calhoun County, S. C.

City Reports for Week Ended Mar. 15, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Anniston, Ala	1		Haverhill, Mass	1	
Atlanta, Ga		1	Mobile, Ala		1
Birmingham, Ala	3		Pasadena, Calif	1	
Brunswick, Ga		1	Raleigh, N. C	1	1
Charleston, S. C		2	Spartanburg, S. C	1	
Durham, N. C		1	Winston-Salem, N. C	1	1

PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.		Cases.
Camp Devens zone, Mass	4	Camp Merritt zone, N. J	4
Fayetteville sanitary district, N. C	1	Muscle Shoals sanitary district, Ala	1
Camp Funston zone, Kans	1	Picric acid plant zone, Ga	2
Gas and Flame School zone, Ga. and Ala	4	Camp Pike zone, Ark	7
Camp Gordon zone, Ga	9	Camp Zachary Taylor zone, Ky. and Ind	7
Gulfport health district, Miss	6	Camp Travis zone, Tex	3
Camp A. A. Humphreys zone, Va	1	Camp Upton zone, N. Y	7

City Reports for Week Ended Mar. 15, 1919.

Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
Akron, Ohio	3			
Albany, N. Y	8			
Atlanta, Ga			1	0
Attleboro, Mass	1			
Auburn, N. Y	3	2		
Baltimore, Md	27	27		
Bayonne, N. J	1			
Belleville, N. J	3			
Beverly, Mass	1	1		
Bloomfield, N. J			2	2
Boston, Mass	42	23		
Brookline, Mass	2			
Camden, N. J	7			
Chanute, Kans	1	1		
Charleston, W. Va			3	2
Charlotte, N. C	2	5		
Chelsea, Mass	4	3		
Chicago, Ill			389	133
Chicopee, Mass	1			
Chillicothe, Ohio			2	3
Cleveland, Ohio	63	60		
Colorado Springs, Colo		1	2	4
Danvers, Mass	1	1		
Dayton, Ohio	3	3		
Decatur, Ill	1	2		
Detroit, Mich	10	54	18	79
Duluth, Minn	2	2		
East Orange, N. J			5	2
Elmira, N. Y	6	5		
El Paso, Tex	8	12		
Evansville, Ind	3	1		
Fall River, Mass	7	4		
Findlay, Ohio	4	1		
Fitchburg, Mass	1			
Flint, Mich	1	6		
Frederick, Md	2			
Fremont, Ohio	3			

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PNEUMONIA—Continued.

City Reports for Week Ended Mar. 15, 1919—Continued.

Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
Grand Forks, N. Dak	1			
Grand Rapids, Mich	17	3		
Green Bay, Wis	1	1		
Hackensack, N. J	2	3		
Hancock, Mich	1	1		
Harrison, N. J	2			
Haverhill, Mass	9			
Highland Park, Mich	2	2		
High Point, N. C	1			
Holyoke, Mass	2	3		
Independence, Mo			2	2
Jamestown, N. Y			4	1
Jersey City, N. J	9			
Kansas City, Kans			14	
Kansas City, Mo	18	22		
Kearny, N. J	1	3		
Keene, N. H	2			
Lackawanna, N. Y	5	1		
Lakewood, Ohio	3	3		
Lawrence, Mass	3	2		
Long Beach, Calif	1			
Lorain, Ohio	1	2		
Los Angeles, Calif	6	3	6	2
Louisville, Ky	13	65		
Lowell, Mass	1	2		
Ludington, Mich	1			
Lynn, Mass	7	1		
Macon, Ga			1	1
Manitowoc, Wis			3	1
Middletown, N. Y	1			
Montclair, N. J			1	
Morristown, N. J			1	1
Mount Vernon, N. Y	4			
Natick, Mass	4	1		
Newark, N. J	71	11		
New Bedford, Mass	1	2		
New Britain, Conn	2	1		
Newburyport, Mass	3			
New Orleans, La	1	12		
Newton, Mass	3	2		
New York, N. Y		225	414	43
North Adams, Mass	1			
North Tonawanda, N. Y	1			
Norwood, Ohio	1			
Oakland, Calif	1	7	1	1
Oak Park, Ill	2	2		
Oklahoma City, Okla	1	3		
Palestine, Tex	3	1		
Parkersburg, W. Va	2	2		
Passaic, N. J	1	1		
Philadelphia, Pa	92	69		
Pomona, Calif			1	
Pontiac, Mich	3	2		
Reno, Nev	4	3		
Rochester, N. Y	8	4		
Salem, Mass	1	4		
Salt Lake City, Utah	1	2		
San Antonio, Tex	5	1		
San Diego, Calif	2			
Sandusky, Ohio				1
Sanford, Me	1			
San Francisco, Calif	7	4		
Santa Barbara, Calif	1			
Saratoga Springs, N. Y	1	1		
Schenectady, N. Y	2			
Somerville, Mass	2	1		
Springfield, Mass	9	3		
Steubenville, Ohio	1			
Taunton, Mass	1	2		
Toledo, Ohio	1	9		
Trenton, N. J	3	5		
Watertown, Mass	1			
West Orange, N. J	1			
Wichita, Kans	2	1		
Winston-Salem, N. C	1			
Worcester, Mass	2			
Yonkers, N. Y	2	3		

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POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for February, 1919.

During the month of February, 1919, one case of poliomyelitis was reported in Benton County, Iowa, and one case in Erie County, Pa.

City Reports for Week Ended Mar. 15, 1919.

During the week ended March 15, 1919, one case of poliomyeltis was reported at Altoona, Pa., one at Chicago, Ill., and one at Newark, N. J. One death was reported at Chicago, Ill.

RABIES IN ANIMALS.

City Reports for Week Ended Mar. 15, 1919.

Place.	Cases.	Place.	Cases.
Bedford, Ind.	1	Rochester, N. Y.	2
Columbus, Ohio.	1	Winston-Salem, N. C.	1
Kansas City, Mo.	2		

RABIES IN MAN.

City Report for Week Ended Mar. 15, 1919.

One death from rabies was reported at Terre Haute, Ind., during the week ended March 15, 1919.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.		Cases.
Camp Devens zone, Mass.	1	Portsmouth and Norfolk County health district, Va.	1
Camp Funston zone, Kans.	8	Camp Sheridan zone, Ala.	2
Camp Gordon zone, Ga.	7	Camp Sherman zone, Ohio.	1
Gulfport health district, Miss.	1	Camp Zachary Taylor zone, Ky. and Ind.	21
Camp Jackson zone, S. C.	1	Camp Travis zone, Tex.	1
Camp Lee zone, Va.	1	Wilmington sanitary district, N. C.	2
Camp Pike zone, Ark.	7		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 708.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases		Cases.
Gas and Flame School zone, Ga. and Ala.	14	Camp Polk zone, N. C.	3
Camp Gordon zone, Ga.	46	Portsmouth and Norfolk County health district, Va.	4
Camp A. A. Humphreys zone, Va.	4	Tidewater health district, Va.	3
Camp Lewis zone, Wash.	1	Camp Travis zone, Tex.	4
Muscle Shoals sanitary district, Ala.	11		

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Floyd County	1	
Grundy County	1	
Linn County	17	
Lucas County	1	
Monona County		1
Page County	1	
Polk County	8	
Pottawattamie County	6	
Scott County	8	
Story County	1	
Van Buren County	1	
Wapello County	10	
Total	76	1
North Dakota:		
Cass County	1	
Grand Forks County	2	
Ramsey County	9	
Richland County	3	
Sargent County	4	
Total	19	
Erie County	2	
Huntingdon County	9	
Wyoming County	1	
Total	25	
South Carolina:		
Greenville County	5	
Wyoming:		
Albany County	12	
Campbell County	2	
Carbon County	7	
Laramie County	9	
Lincoln County	10	
Natrona County	10	
Washakie County	1	
Weston County	7	
Total	58	

City Reports for Week Ended Mar. 15, 1919.

Place.	Cases.	Deaths.
Atlanta, Ga	27	
Bedford, Ind	5	
Beloit, Wis	1	
Billings, Mont	4	
Birmingham, Ala	1	
Boston, Mass	4	
Canton, Ohio	1	
Cedar Rapids, Iowa	4	
Chambersburg, Pa	1	
Chanute, Kans	15	
Charleston, W. Va	3	
Cheyenne, Wyo	1	
Chicago, Ill	8	
Cleveland, Ohio	4	
Columbus, Ohio	2	
Council Bluffs, Iowa	3	
Covington, Ky	2	
Dallas, Tex	8	
Davenport, Iowa	10	
Dayton, Ohio	2	
Decatur, Ill	1	
Denver, Colo	7	
Des Moines, Iowa	4	
Detroit, Mich	1	
Dubuque, Iowa	1	
Duluth, Minn	2	
Durham, N. C	1	
El Paso, Tex	1	
Eureka, Calif	2	
Evansville, Ind	1	
Everett, Mass	1	
Flint, Mich	1	

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SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	1	Picric acid plant zone, Ga.	1
Gas and Flame School zone, Ga. and Ala.	5	Camp Pike zone, Ark.	4
Camp Gordon zone, Ga.	24	Camp Polk zone, N. C.	3
Gulfport health district, Miss.	1	Camp Sheridan zone, Ala.	18
Camp A. A. Humphreys zone, Va.	2	Camp Sherman zone, Ohio.	3
Camp Jackson zone, S. C.	25	Camp Zachary Taylor zone, Ky. and Ind.	37
Camp Lee zone, Va.	3	Tidewater health district, Va.	1
Muscle Shoals sanitary district, Ala.	9	Camp Travis zone, Tex.	2

TETANUS.

City Reports for Week Ended Mar. 15, 1919.

During the week ended March 15, 1919, there were reported three deaths from tetanus: One each at Charleston, S. C., Philadelphia, Pa., and San Bernardino, Calif.

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Mar. 29, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga.	18	Camp Sheridan zone, Ala.	1
Gulfport health district, Miss.	1	Camp Sherman zone, Ohio.	1
Camp A. A. Humphreys zone, Va.	2	Camp Zachary Taylor zone, Ky. and Ind.	15
Camp Lee zone, Va.	1	Tidewater health district, Va.	1
Muscle Shoals sanitary district, Ala.	1	Camp Travis zone, Tex.	8
Picric acid plant zone, Ga.	1	Camp Upton zone, N. Y.	1
Camp Pike zone, Ark.	3	Wilmington sanitary district, N. C.	3
Camp Polk zone, N. C.	3		
Portsmouth and Norfolk County health district, Va.	3		

See also Diphtheria, measles, scarlet fever and tuberculosis, page 708.

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Wetmore	1
Sedgwick County—	
Valley Center	1
Sheridan County—	
Selden (R. D)	1
Total	7
North Dakota:	
McKenzie County	3
Ransom County	1
Ward County	1
Total	5
Pennsylvania:	
Adams County	1
Allegheny County	12
Armstrong County	9
Beaver County	4
Berks County	3
Blair County	3
Bucks County	2
Butler County	28
Chester County	4
Total	150
South Carolina:	
Marion County	3
Newberry County	1
Richland County	2
Total	6
Wyoming:	
Lincoln County	1

City Reports for Week Ended Mar. 15, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Albany, N. Y	1		McKeesport, Pa	1	
Allentown, Pa	1		Martinsburg, W. Va	1	
Auburn, N. Y	1	1	Memphis, Tenn	20	
Baltimore, Md	3	1	Milwaukee, Wis	1	
Beverly, Mass	1		Missoula, Mont		2
Birmingham, Ala	2		Mobile, Ala		1
Boston, Mass	1		Moline, Ill	1	
Buffalo, N. Y	1		New Bedford, Mass	1	
Charleston, W. Va	1		New Haven, Conn	1	
Chicago, Ill	2		New Orleans, La	2	
Concord, N. H		1	Newton, Mass	1	
Dallas, Tex	1		New York, N. Y	4	3
Dayton, Ohio	4		Philadelphia, Pa	6	1
Denver, Colo	2		Reading, Pa	1	
Detroit, Mich	1		Richmond, Va	2	
Elizabeth, N. J	2		Sacramento, Calif		1
Fall River, Mass		1	St. Louis, Mo	1	1
Galveston, Tex	1		St. Paul, Minn	1	
Hammond, Ind		1	San Antonio, Tex	1	
Hartford, Conn	1		San Francisco, Calif	2	
Independence, Mo	2	2	Scranton, Pa	2	
Kansas City, Mo		1	Tacoma, Wash	1	
Lawrence, Mass	1	1	Washington, D. C	1	
Los Angeles, Calif	4		Washington, Pa	1	
Lowell, Mass	1		Wilmington, Del	1	
Lynn, Mass	1				

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	24,200	5								
Ann Arbor, Mich.	15,041	11	3		1		1		1	2
Anniston, Ala.	14,326								3	
Ansonia, Conn.	16,954	5								
Appleton, Wis.	18,005	2								
Arlington, Mass.	13,073	3	2						1	
Asbury Park, N. J.	14,629	3	1						1	
Ashtabula, Ohio.	22,008	7								
Atlanta, Ga.	196,144	71	1		20	1	6		5	5
Atlantic City, N. J.	59,515	16					1		8	1
Attleboro, Mass.	19,776	2	2						1	
Auburn, N. Y.	37,823	18					2			1
Austin, Tex.	35,612	5							1	1
Bakersfield, Calif.	17,543								2	
Baltimore, Md.	594,637	251	35	3	18		178	4	28	28
Bangor, Me.	26,958		1							
Barre, Vt.	12,401	3								
Baton Rouge, La.	17,544	5	1		1		1			2
Battle Creek, Mich.	30,159	1	7	1	16		5			
Bayonne, N. J.	72,204		3		1		4		3	
Beacon, N. Y.	11,674	2								
Beatrice, Nebr.	10,437	3								
Beaumont, Tex.	28,851	13							1	
Bedford, Ind.	10,613	4					1			
Bellaire, Ohio.	14,575	20					1			
Belleville, N. J.	12,797						1			
Beloit, Wis.	18,547	6								
Benton Harbor, Mich.	11,099	2			1					
Berkeley, Calif.	60,427	9					3			
Berlin, N. H.	13,892	5								
Beverly, Mass.	22,128	8							3	2
Biddeford, Me.	17,760	2								
Billings, Mont.	15,123				1		5			
Birmingham, Ala.	189,716	61	3		11		2		6	5
Bloomfield, N. J.	19,013	2			1				2	
Bloomington, Ind.	11,661	4			1				1	
Boise, Idaho.	35,951	2					3			
Boston, Mass.	767,813	275	64	4	6		48		69	27
Braddock, Pa.	22,060		1						1	
Bradford, Pa.	14,544						2		1	
Brazil, Ind.	10,472	10								
Bridgeport, Conn.	124,724	35	6		10		1		8	2
Bristol, Conn.	16,318	3	1		7		1		1	
Brockton, Mass.	69,152	11	2	1	1		5		4	2
Brookline, Mass.	33,526	8			1					1
Brunswick, Ga.	10,984	6			5				2	1
Buffalo, N. Y.	475,781	158	34	9	34	4	17	1	29	14
Burlington, Iowa.	25,144	13					2			2
Burlington, Vt.	21,802	11			44					

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Hazelton, Pa.	28,981				2					
Hibbing, Minn.	17,550		2							
Highland Park, Mich.	34,859	8	5		1		2			
High Point, N. C.	13,429								1	
Hoboken, N. J.	78,324	25	7	1	3		1		2	2
Holland, Mich.	12,459	4								1
Holyoke, Mass.	60,203		1	1			6		2	2
Houston, Tex.	116,878	17	1		11		4			3
Hudson, N. Y.	12,898	6								
Hutchinson, Kans.	21,461		1		9		2			
Independence, Mo.	11,964	11	1		2				1	2
Indianapolis, Ind.	233,650	139	12		18		16		5	5
Ironwood, Mich.	15,095	3					1			
Ithaca, N. Y.	16,017	3	1		2		11	1		
Jamestown, N. Y.	37,451	13	1				6		3	1
Janesville, Wis.	14,311	6								
Jersey City, N. J.	267,779		30		15		7		14	
Johnstown, N. Y.	10,678	1								
Johnstown, Pa.	70,473		2		2				6	
Kalamazoo, Mich.	50,528	19								
Kankakee, Ill.	13,270						2			
Kansas City, Kans.	82,331		3		2		1		4	
Kansas City, Mo.	248,381	118	17	1	28	1	11	1	1	11
Kearny, N. J.	21,808	9	1				4		3	
Keene, N. H.	10,068	6							1	
Kenosha, Wis.	50,756		2		63				1	
Knoxville, Tenn.	36,346						1		1	1
Kokomo, Ind.	17,010	22	1				12	1		
Lackawanna, N. Y.	16,259	7	1		2					
La Crosse, Wis.	30,417	8								
La Fayette, Ind.	20,081	13								2
Lakewood, Ohio.	15,181	9			1					
Lancaster, Ohio.	15,531	7					1			
Lancaster, Pa.	47,227		1		208		1		1	
Laurel, Miss.	11,539		1				1			
Lawrence, Mass.	85,892	33	1	1					6	8
Lebanon, Pa.	26,349				40					
Lima, Ohio.	30,508	11	1				3		1	
Lincoln, Nebr.	43,973	19	3	1			4			
Little Rock, Ark.	45,941	13				2		2	2	
Logansport, Ind.	19,050	3					2			
Long Beach, Calif.	17,809	15								
Long Branch, N. J.	13,298	1								

[1] Population Apr. 15, 1910.

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Plattsburg, N. Y.	13,111	5							2	
Plymouth, Pa.	19,439				32					
Pomona, Calif.	13,624	1								
Pontiac, Mich.	18,006	11	9	1			1			1
Port Chester, N. Y.	16,727	6								
Portland, Me.	64,720	12		1			5			
Portland, Oreg.	308,399	59	2				8		4	5
Portsmouth, N. H.	11,730						1		1	
Portsmouth, Va.	40,093								1	1
Pottsville, Pa.	22,717		3		5					
Poughkeepsie, N. Y.	30,786	15	4		2				2	1
Providence, R. I.	259,895	76	20		3	1	11			6
Pueblo, Colo.	56,084						1			
Quincy, Ill.	36,832	10	1				6			4
Quincy, Mass.	39,022	7							2	
Racine, Wis.	47,465	15							3	
Rahway, N. J.	10,361	3								1
Raleigh, N. C.	20,274	16			1				1	1
Reading, Pa.	111,607		3		203		1			
Redlands, Calif.	14,573	2								1
Reno, Nev.	15,514	7								
Richmond, Va.	158,702	60	1		7				6	5
Riverside, Calif.	20,496	1								
Roanoke, Va.	46,282	10		1	8		2		1	
Rochester, N. Y.	264,714	91	10	2	1		22	2	8	7
Rockford, Ill.	56,739	14			16		3			
Rock Island, Ill.	29,452	10			2		1			
Rocky Mount, N. C.	12,673	4								
Rome, N. Y.	24,259						1		4	
Rutland, Vt.	15,038	5								2
Sacramento, Calif.	68,984	21					2			1
Saginaw, Mich.	56,469	25	3		1		2			
Saint Cloud, Minn.	12,013								2	
Saint Joseph, Mo.	86,498	31	3				6			2
Saint Louis, Mo.	768,630	319	28	5	12		15	1	25	18
Saint Paul, Minn.	252,465	59	12	1	28		13		13	2
Salem, Mass.	49,346		2				14			1
Salt Lake City, Utah	121,623	40	2	3			6			3
San Angelo, Tex.	[1]10,321	3								2
San Antonio, Tex.	128,215	9	11	1	1		1		9	7
San Bernardino, Calif.	17,616	12								
San Diego, Calif.	56,412	28	2				4		16	6
Sandusky, Ohio	20,226	13			1		1		1	
San Francisco, Calif.	471,023	139	16	2	1		6		31	24
Santa Barbara, Calif.	15,360	7								1
Santa Cruz, Calif.	15,150	4								
Saratoga Springs, N. Y.	13,839	6	1							1
Saugus, Mass.	10,210	1	4	1			2			
Sault Ste. Marie, Mich.	14,130	3								

[1] Population Apr. 15, 1910.

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FOREIGN.

CANADA.

Influenza—Province of Ontario—February, 1919.

During the month of February, 1919, 812 fatal cases of influenza, including 150 cases occurring previously but not notified at the time of occurrence, were reported in the Province of Ontario, Canada. Decline in the mortality from influenza in the Province is shown by the following figures: Month of October, 1918, number of deaths, 3,015; November, 1918, 2,608; December, 1918, 1,568; January, 1919, 1,514.[1]

FRANCE.

Influenza—Marseille.[2]

During the month of December, 1918, 353 fatal cases of influenza were reported at Marseille, France, with 71 deaths from pneumonia and 275 from other respiratory diseases. (Total number of deaths from all causes, 1,892.)

LIBERIA.

Quarantine Against Influenza Modified.[3]

The quarantine restrictions which were put in force, October 5, 1918, to prevent the introduction of influenza into Liberia from ports in Africa, were declared out of force January 2, 1919, except that in the case of a vessel arriving at a port in Liberia with history of fatal cases of influenza occurring on board within five days of arrival, the vessel should be placed in quarantine and made subject to the restrictions contained in quarantine circular of October 5, 1918.

MADEIRA.

Influenza—Funchal.

Influenza was reported present at Funchal, Madeira, with 3 fatal cases, during the week ended March 1, 1919. (Total number of deaths during the week, 22.)

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[1] Public Health Reports, Mar. 7, 1919, p. 482. [2] Public Health Reports, Nov. 29, 1918, p. 2164.
[3] Public Health Reports, Dec. 13, 1918, p. 2244.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Apr. 4, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Jan. 19–25	2,096	1,926	
Calcutta	do		304	
Karachi	Jan. 26–Feb. 8	2	2	
Madras	Jan. 26–Feb. 1	86	70	
Indo-China:				
Cochin-China—				
Saigon	Jan. 13–26	54	35	
Java:				
East Java				Dec. 10–31, 1918: Cases, 272; deaths, 229. Jan. 1–7, 1919: Cases, 7; deaths, 6.
Surabaya	Dec. 10–31	19	22	
Do	Jan. 1–7	4	4	
West Java				Jan. 3–23, 1919: Cases, 8; deaths, 1.
Batavia	Jan. 10–23	6	1	
Cheribon	Jan. 3–9	1		

PLAGUE.

Egypt				Jan. 1–Feb. 27, 1919: Cases, 65; deaths, 53.
Provinces—				
Assiout	Feb. 24–27	5	2	1 septicemic.
Girgeh	Feb. 22–24	4	2	2 pneumonic.
Minieh	Feb. 21–27	2	2	1 pneumonic.
Suez	Feb. 23	2	1	
India				Jan. 12–25, 1919: Cases, 4,479; deaths, 3,250.
Madras	Jan. 26–Feb. 1	1	1	
Madras Presidency	do	477	332	
Rangoon	Jan. 19–25	14	14	
Indo-China:				
Cochin-China—				
Saigon	Jan. 13–19	1	1	
Java:				
East Java				Dec. 10–31, 1918: Cases, 62; deaths, 62. Jan. 1–7, 1919: Cases, 32; deaths, 32.
Surabaya (district)	Dec. 10–31	31	31	
Do	Jan. 1–7	20	20	

SMALLPOX.

Brazil:				
Rio de Janeiro	Dec. 1–28	46	19	
Do	Dec. 29–Jan. 25	25	11	Oct. 6–12, 1918: Cases, 15; deaths, 10.
Canada:				
Nova Scotia—				
Halifax	Mar. 9–15	30		
Ontario—				
Ottawa	do	8		
Quebec—				
Quebec	do	1		
China:				
Amoy	Feb. 4–17			Increasing.
Antung	Feb. 10–16	1		
Foochow	Feb. 2–8			Present.
Great Britain:				
Liverpool	Feb. 23–Mar. 1	3		2 cases from vessels.
Greece:				
Saloniki	Feb. 2–15		3	
India:				
Bombay	Jan. 19–25	19	9	
Calcutta	Jan. 19–25		15	
Karachi	Feb. 2–8	8	1	
Madras	Jan. 26–Feb. 1	18	8	
Indo-China:				
Cochin-China				
Saigon	Jan. 20–26	2	2	
Japan:				
Taihoku	Jan. 22–Feb. 11	123	17	Island of Formosa.
Java:				
East Java				Dec. 10–31, 1918: Cases, 1; deaths, 1. Jan. 1–7, 1919: Cases, 1.
Surabaya district	Dec. 10–31	1	1	
Do	Jan. 1–7	1		
West Java				Jan. 3–23, 1919: Cases, 119; deaths, 29.
Batavia	Jan. 3–23	21	15	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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Japan:				
Nagasaki	Feb. 10–23	8	1	
Mexico:				
Mexico City	Feb. 23–Mar. 8	81		
Netherlands:				
Rotterdam	Feb. 2–15	194	24	
Siberia:				
Vladivostok	Jan. 17–30	6	1	

YELLOW FEVER.

Colombia:				
Cartagena	Jan. 29–Feb. 4		4	

Reports Received from Dec. 28, 1918, to Mar. 28, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17–30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13–19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18–Dec. 28	1,351	1,031	
Do	Dec. 29–Jan. 18	1,092	1,437	
Calcutta	Sept. 20–Dec. 21		241	Report for Nov. 23, 1918, missing.
Do	Dec. 29–Jan. 18		197	
Madras	Oct. 5–Dec. 28	264	164	Oct. 27–Nov. 2, 1918: Cases, 9; deaths, 4.
Do	Jan. 5–18	288	197	
Rangoon	Oct. 5–Dec. 21	35	33	
Do	Dec. 29–Jan. 18	13	10	
Indo-China				July 1–Aug. 31, 1918: Cases, 670; deaths, 412.
Anam	July 1–Aug. 31	37	30	
Cambodia	do	322	169	
Cochin-China	do	357	279	
Saigon	Oct. 7–Dec. 22	75	45	
Do	Dec. 3–Jan. 5	94	47	
Kwang-Chow-Wan	July 1–31	50	34	
Tonkin	July 1–Aug. 31	4		

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		79	65	
		20	15	
		19	17	
	Nov. 17–Dec. 21	12	5	
	Jan. 12–Feb. 1	22	15	
	Oct. 27–Nov. 2	5	6	
	Nov. 17–Dec. 28	44	30	
	Dec. 29–Feb. 1	28	17	
	Dec. 22–28	7	5	
	Jan. 5–25	28	14	
	Oct. 27–Nov. 2	38	28	
	Nov. 17–Dec. 21	163	75	
	Dec. 29–Jan. 25	17	16	
	Dec. 15–21	41	20	
	Jan. 12–18	13	12	
	Dec. 8–28	17	8	
	Dec. 29–Feb. 1	37	22	
	Oct. 27–Nov. 2	9	6	
	Nov. 17–Dec. 21	70	51	
	Jan. 5–Feb. 1	49	35	
	Oct. 27–Dec. 28	18	11	
	Dec. 29–Feb. 1	46	38	
	Jan. 5–11	8	4	
	Nov. 24–30	4	5	
	Oct. 27–Nov. 2	6	5	
	Nov. 17–Dec. 28	75	48	
	Jan. 5–18	23	17	
ija	Jan. 12–25	9	6	
Negros	Nov. 2–9	20	8	
	Nov. 17–Dec. 7	6	6	
	Jan. 5–Feb. 1	22	16	
a	Nov. 24–Dec. 14	4	4	
	Jan. 5–Feb. 1	15	12	
n	Nov. 2–9	236	192	
	Nov. 17–Dec. 28	428	313	
	Dec. 29–Feb. 1	96	61	
	Oct. 27–Nov. 2	3	1	
	Nov. 24–30	16	5	
	Dec. 15–21	8	1	
	Nov. 17–23	8	4	
	Jan. 19–25	8	4	
	Nov. 2–9	7	4	
	Nov. 17–Dec. 28	54	25	
	Dec. 29–Feb. 1	54	47	
	Nov. 2–Dec. 28	18	14	
ga	Dec. 8–28	27	19	
	Jan. 5–18	19	15	
	Sept. 29–Oct. 5	2	.....	
	To July 16	3,388	1,054	In civil and military hospitals. In military hospitals, July 5–Aug. 21, 1918: Cases, 884; deaths, 783.
	July 17–Sept. 11	3,479	1,455	
slav	Sept. 1–20	7	6	Sept. 1–20, 1918: 11 cases on s. s. Helena.
	do	25	.....	

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		1,145	125	deaths, 105.
	Oct. 5-Dec. 21	84	81	
	Dec. 29-Jan. 18	21	19	
				July 1-Aug. 31, 1918: Cases, 125; deaths, 115.
	July 1-Aug. 31	37	32	
	do		49	
	do	57	33	
	Oct. 7-Nov. 24	5	1	
n	July 1-31	1	1	
				Oct. 7-Nov. 18, 1918: Cases, 78; deaths, 78.
trict)	Oct. 7-Nov. 18	61	61	
				Sept. 25-Oct. 16, 1918: Cases, 14; deaths, 14.
	Sept. 25-Oct. 16	6	6	
	Nov. 16-29	5	2	
	Sept. 21-28	4	3	
	Oct. 5-12	2	2	
	Dec. 30	1		
	Jan. 14	1	1	At Suez quarantine station from Bombay.

SMALLPOX.

	Oct. 1-Dec. 31	2	1	
	Dec. 30-Jan. 5	1		
	Sept. 1-Nov. 30	6	1	
	Dec. 22-28	1		
	Jan. 5-18	2		
	Nov. 8-14	3		
	Jan. 26-Feb. 22	6		
	Dec. 29-Jan. 4			Present.
	Jan. 10			Do.
	do			Do.
	Dec. 7-28	10		
	Jan. 5-Mar. 8	131		
	Dec. 29-Jan. 4			Do.
	Jan. 5-Mar. 8	4		
	Jan. 19-25	1		
	Jan. 12-Mar. 8	12		
	Feb. 2-15	2		

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	do	3	3	
		7	1	
	Dec. 22–28		2	District of Allenstein.
	Jan. 5–Feb. 8	5		
		9	1	
	Mar. 8			
	Sept. 29–Dec. 21	2	2	
	Dec. 29–Jan. 18		34	
			59	
	Nov. 10–Dec. 29			
	Dec. 30–Feb. 2	13	4	
		11	3	
	Oct. 7–21			Oct. 7–21, 1918: Cases, 5.
		4		
				Sept. 25–Oct. 16, 1918: Cases, 8.
	Oct. 2–23			Oct. 2–23: Cases, 31; deaths, 6.
		15	4	
	Mar. 17			Present.
	do	300		Estimated.
	Oct. 5–Dec. 27			
	Dec. 28–Jan. 10	2		
		3		
	Feb. 2–23			
	Nov. 1–30		3	
	Sept. 22–Dec. 28	2		
	Dec. 29–Jan. 25	434		
		128		
	Dec. 8–14			
	Jan. 12–18	1		
		4		
				Jan. 30–Feb. 27, 1919: Cases, 462; deaths, 46.
	Feb. 5	62		
	Sept. 1–Dec. 30			Among soldiers and prisoners.
		43		
	Oct. 1–31			
	Dec. 1–31		2	
			1	
	Sept. 14–28			
				Present among natives in several interior towns.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Mar. 28, 1919—Continued.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Pernambuco	Oct. 1-Nov. 30	2	1	
Ecuador:				
Babahoyo	Nov. 1-30	1	.....	
Catarama	Feb. 1-15	1	.....	
Chobo	Jan. 1-15	1	.....	
Daule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-Feb. 15	3	1	
Guayaquil	July 1-Dec. 31	326	177	
Do	Jan. 1-Feb. 15	104	54	
Milagro	Nov. 1-15	1	.....	
Do	Feb. 1-15	1	.....	
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Payo (Hacienda)	Nov. 1-15	1	.....	
Punta de Piedra	Nov. 1-30	1	.....	
Salvador:				
San Salvador	Jan. 9	1	.....	
On vessel:				
S. S. Jamaica	Jan. 30	1	.....	At quarantine station, Canal Zone, Panama.

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PUBLIC HEALTH REPORTS

VOL. 34 APRIL 11, 1919 No. 15

SWITZERLAND HARD HIT BY INFLUENZA.

Official reports just received from Switzerland show that the pandemic of influenza affected about 700,000 out of that country's population of 4,000,000. This is 17.5 per cent. The sudden rise of the pandemic is well shown by the following monthly totals of cases reported during 1918:

January	2	July	53,698
February	4	August	41,626
March	6	September	41,642
April	13	October	263,399
May	3	November	159,422
June	6	December	104,612

Here we see again, as was the case in England,[1] two distinct waves; one with its crest in July, the other with the crest in October. The occurrence of these waves in practically all parts of the world where the pandemic prevailed is most puzzling. It is difficult to conceive of any external, i. e., environmental, influence acting so uniformly throughout the world, and that the virus should everywhere show these peculiar variations in infectivity and virulence is certainly most remarkable.

THE NEW SCIENCE OF INDUSTRIAL PHYSIOLOGY.

By FREDERIC S. LEE, Ph. D., LL. D., Professor of Physiology in Columbia University; Consulting Physiologist to the United States Public Health Service; Chairman of the Committee on Fatigue in Industrial Pursuits of the National Research Council.

In surveying the extraordinary growth of industry during recent decades one can not fail to be struck by its many-sided aspects, the diversity of its problems, and the variety of human intellects that have been called upon to solve the problems. Industry is not simply an affair of employer and employee; it has its manufacturing aspects, its economic aspects, its engineering aspects, its medical aspects, its chemical aspects, its human aspects, and its efficiency

[1] Public Health Reports, Apr. 4, 1919, pp. 683 and 684.

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aspects. Quite recently its aspects of efficiency have risen into great prominence, and it has come to be recognized by all concerned that industrial success is dependent in large measure on the efficiency of the labor element. What has been called scientific management and efficiency engineering has accomplished something in promoting industrial efficiency—this must be acknowledged even by its opponents—but a critical analysis of the conventional scientific management reveals its shortcomings and its inability to go very far in eliminating the great problem of inefficiency.

The fact must be recognized that in the body of the worker, with its combination of living organs and tissues, undergoing chemical reactions and transforming energy under the direction of a nervous system, we have a very intricate mechanism, upon the proper working of which depend in large degree industrial efficiency and, through it, industrial success. This act began to be perceived many years ago through the publication of various isolated studies and finally of Miss Goldmark's prophetic "Fatigue and Efficiency." But the the period of the war, with its extraordinary call upon human energies in the field of industry, has emphasized as never before the hygienic, or more properly speaking, the physiological aspects of industrial activity, and during the past four years the beginnings of a new science, an industrial physiology, have appeared and attracted the attention of scientific men and the more sagacious of industrial leaders.

I have called this new science "Industrial physiology," because this term seems to me to be the most appropriate single term to use in discussing this new phase of the application of scientific method to the solution of human problems. By it I mean to designate the sum of knowledge pertaining to the working of the human mechanism in industrial activity, and it thus includes psychological phenomena as well as those more technically recognized as physiological.

Industrial physiology has two objects: First, the more purely scientific one of learning how the industrial worker actually performs his work and what the conditions are under which he can work most efficiently and can produce the largest output while at the same time maintaining his body in health and in the best working condition; and secondly, the more practical object of establishing in the factories the conditions which conduce at the same time to the maximum output and the maintenance of the maximum power of the worker. The former of these two objects is now being achieved; the latter will be achieved when it becomes clear to both employers and workers that it is to the advantage of both that industrial work be organized on a really intelligent basis and not, as heretofore, on a basis of ignorance of how the worker can do his best.

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The methods by which industrial physiology is being developed are the recognized methods of all scientific investigation, namely, observation and experiment. The investigations are carried on chiefly in the factories, the workers being used as the subjects and under their actual working conditions, these conditions being changed when it is desired to compare the efficiency of one set of conditions with that of another. Exact measurements of output are made, and, where it is possible, exact tests of the physiological effects of the work are employed. Every effort is made to procure exact data and utilize these as a basis for forming conclusions, rather than to rely upon mere opinion and preconceived notions.

Some of the topics that have been or are being investigated, and some of the results, are the following:

Certain physiological and psychological tests have been employed with workers, and it appears practicable to employ some of these tests in selecting workers and assigning them to their jobs.

The output of the successive hours of the working day in different types of operations has been measured, and the daily curves of the output have been plotted. These vary with the kind of operation, but are alike in showing a reduced efficiency, indicating a growing fatigue, as the day proceeds.

Reduction in the length of the working day is characterized by an increase in the output of the successive hours and usually by a total increase in that of the day. The optimum duration of work probably varies with the character of the work itself.

The introduction of resting periods in the working spell is accompanied, especially where the working day is long, by a total increase in the day's production. A five-hour working spell, unbroken by resting periods, is probably always too long.

Overtime following a day of labor is inadvisable, as is also Sunday work following a week's labor. These tend to impair the working power of the worker.

A hot day tends to impair strength and reduce output. Every effort should be made to keep the body of the worker cool.

Night work is, in general, less efficient than day work. Its total output is less, and this, with a long working night, falls off enormously in the early morning hours. Alternation of periods of night work with periods of day work is more profitable than continuous night work.

Women are capable of performing a much greater variety of industrial operations than has heretofore been recognized. They should not be employed for night work. Statistics show that they are absent from their work more frequently than men. The problem of women as compared with men in industry is not that of their

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greater or less general efficiency, but rather a problem of what types of work each sex is best fitted for.

Accidents to workers are a grave source of inefficiency. They are caused by fatigue, inexperience, speed of working, insufficient lighting, high temperature, and other factors. Many industrial accidents are preventable, and adequate provisions for first-aid measures tend to diminish the seriousness of accidents.

Food and efficiency are directly connected with one another, and suitable and adequate food can probably be best provided through the establishment of industrial canteens.

A high labor turnover is incompatible with the highest degree of efficiency. It is expensive, in that it imposes upon the employer the necessity of training new workers, and it is a serious factor in the causation of accidents.

Physiological analyses of certain operations have been made, by means of the cinematograph and other methods, and it has been found possible to eliminate unnecessary motions and to train workers so as to secure a more regular rhythm, such measures increasing efficiency.

The self-limitation of work on the part of workers has been studied and found to be very common. Every legitimate effort should be employed by foremen and managers to eliminate this and to induce workers to work up to their physiological capacity. Driving workers beyond their physiological capacity defeats its own ends.

Such topics as the above and others likewise bearing on efficiency have been studied extensively during the past three years in both England and America. In England the Health of Munition Workers Committee carried on a series of investigations from 1915 to 1918, and have published their data in a series of 23 valuable reports. The circulation of these reports has been large, over 210,000 copies being distributed, and the committee's recommendations have been widely accepted. The committee has now ceased to exist, but its investigations are being continued actively by a new body, the Industrial Fatigue Research Board, which has been appointed jointly by the Department of Scientific and Industrial Research and the Medical Research Committee. The functions of this new board are "to consider and investigate the relations of the hours of labor and other conditions of employment, including methods of work, to the production of fatigue, having regard both to industrial efficiency and to the preservation of health among the workers." The board has as its chairman Prof. Sherrington, F.R.S., of Oxford, and its members comprise such well-known men as Sir Walter Fletcher, F.R.S., secretary of the Medical Research Committee; Col. Myers, F.R.S., director of the psychological laboratory of Cambridge; Dr. Collis, head of the welfare and health section of the ministry of munitions;

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Dr. Legge, of the Home Office; representatives of two of the leading industrial establishments of England; and others. The board has formulated an ambitious and far-reaching plan for its future investigations, and is considering a suggestion to send soon to America several representatives to inspect the leading factories, to study the conditions of labor, and to learn what is being done here in the direction of placing industry on a more scientific basis.

In America during the past 18 months the Public Health Service, with the cooperation of the committees on fatigue in industrial pursuits and on industrial fatigue, of the National Research Council and the Council of National Defense, respectively, has been conducting a fruitful investigation of a variety of topics within the scope of industrial physiology, and its report will soon be ready for publication.

During a recent visit to England and France in the interests of the Public Health Service the writer was privileged to confer with the members of the Industrial Fatigue Research Board and to take part in its deliberations. He was much impressed with the highly scientific character of the board's work and aims, and the earnestness of its determination to make a broad and searching study of the physiological aspects of industrial work. He was able to establish relations of intimate and cordial cooperation between the board and the United States Public Health Service. In France a similar sympathetic spirit of international amity was found among several of the leading scientific men, and it is probable that a center for a similar type of scientific investigation will soon be established there. The Marey Institute of Paris, under the directorship of Prof. Richet and the subdirectorship of Dr. Bull, had already outlined such a research just before the war put a stop to the realization of the institute's plans and turned its activities into other urgent war channels.

While this work is thus progressing in the three countries that are of leading industrial importance the universities are not inactive. In England, Prof. Stanley Kent, who has been carrying on an independent investigation of some phases of industrial fatigue during the past three years, has been called from his chair of physiology in Bristol to become the director of a new Department of Industrial Administration in the Municipal Technical College of Victoria University, Manchester. In this position he will find a rich field for research in the important industrial establishments situated in Manchester and vicinity. In our own country, Harvard University, through the foresight and generosity of a group of manufacturers, has been enabled to establish courses of instruction and opportunities for investigation in the medical, physiological, and sanitary aspects of industry; and similar activities are expected from the School of Hygiene and Public Health recently established in Johns Hopkins University.

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With the ending of the war the problems of industry press for solution more earnestly than ever, and one of the most timely of these problems concerns the physiological aspects of the work of the human machine. Upon us in America, where industry is destined to lead the world, there is imposed a grave duty—that of directing investigation along such lines that empiricism and tradition, those two obstacles to progress which have long been potent in industrial evolution, shall be cast out and industry shall be placed permanently upon a scientific basis.

REST PERIODS FOR INDUSTRIAL WORKERS.

Written as it is from the standpoint of the manufacturer, and considering mainly, therefore, questions of output, of administration, and of labor turn-over, the report just issued by the National Industrial Conference Board, entitled "Rest Periods for Industrial Workers," constitutes an interesting addition to the literature on rest periods and fatigue.[1]

The report published by the National Industrial Conference Board is based on a study carried on chiefly by means of a schedule of inquiry sent to 388 employers reported to have made experiments with rest periods. Of these, 104 reported that they had tried regular rest periods; 129 stated that they had made no experiments with rest periods; and no replies were received from the remaining 155 establishments, presumably in most instances because they had no experience to report.

Following are the principal conclusions expressed in the board's report:

"From the evidence presented it is obvious that all workers require pauses for rest or relaxation through change of position, but in many occupations the nature of the work itself allows such relief. A decision whether fixed rest periods will be more beneficial than unregulated pauses is best reached after a plant survey and time study of each occupation. The tendency to allow rest periods to women, even though they may not be granted to men, is a precaution on the safe side, but the type of work is a more fundamental consideration than the sex of the worker. Rest periods may be advantageous for both men and women in some occupations, while unnecessary for both in others.

"The experience assembled in this report indicates that rest periods have been found especially advantageous for workers on repetitive tasks demanding constant and close application. Hence the tendency of modern manufacturing to greater standardization and the increased use of automatic machinery make the problem of regular rest periods one of increasing significance to employers. Regular rest pauses based on experimental observation have also proved

[1] Research Report No. 13, published by the National Industrial Conference Board, 15 Beacon Street, Boston, Mass.

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valuable in heavy work and in work requiring constant standing or sitting. Other advantages of regular rest periods are the elimination of time waste, by putting a stop to irregular pauses, improvement of discipline, and the cultivation of regular habits among employees with respect to lunches, water drinking, and the use of toilets.

"As a rule, rest periods are from 5 to 15 minutes in length and usually two in number—one in the middle of the forenoon and one in the middle of the afternoon—a 10-minute pause being the most common period. Careful studies in some establishments, however, indicate that from the standpoint of production brief pauses at frequent intervals may secure better results than longer and less frequent recesses. The length and distribution of rest periods may be adapted to occupational and individual variations.

"No direct influence on the frequency of accidents was reported, but decrease in fatigue and improvement of general health were commonly noted in replies of employers. Evidence drawn from British experience and from the work of time-study experts demonstrates increase of output in specific cases after the introduction of rest periods. Where an increase in output did not occur, it was frequently reported that no decrease was detected. Many reports indicated an improvement in quality of work, especially where the task required concentrated attention. Rest periods had no apparent relation to labor turnover.

"While rest periods may be a valuable supplementary means for the removal of fatigue, the fundamental means for its prevention are the provision of suitable working conditions, such as proper lighting, heating, ventilation, installation of labor-saving devices, and the adaptation of the equipment to the worker.

* * * * * * *

"Except where pauses inherent in the nature of the work seemed to make regular rest periods superfluous, objections of employers usually referred to details of discipline.

"The attitude of employees toward rest periods was apparently somewhat dependent upon the tact and skill of the management. Pieceworkers were inclined to work through the pauses if permitted. While, often, employees would prefer a shorter working day instead of the time allowed for rest periods, this attitude was by no means universal.

"Epitomizing the experience herein reviewed, it is clearly indicated that for certain occupations a short recess in the work spell may be desirable from the standpoint of health, and that it may be made advantageous from the standpoint of production. In other occupations, however, the nature of the work affords such opportunity for relaxation that regular rest periods are not required. Their desirability and their practical utility are largely determined by the particular type of work, the composition of the work force, the length of the work spell, and the special operating conditions in the individual establishment."

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THE STUDY OF INDUSTRIAL FATIGUE IN ENGLAND.[1]

An industrial fatigue research board has been formed in England. This work was begun by the health of munition workers' committee of the Ministry of Munitions, appointed in 1915. That committee was dissolved at the beginning of 1918 and issued its final report in May. The excellence of its work led to a wish that an arrangement could be made for its maintenance on a permanent footing. The department of scientific and industrial research and the medical research committee accordingly determined to establish a permanent organization and contribute the necessary financial aid in due proportion. This proposal won the approval of the home office. The industrial fatigue research board was, therefore, established a short time ago and has now been completed. It will continue the organizing functions of the two bodies financing it and the investigations already in progress.

The board is instructed "to consider and investigate the relations of hours of labor and other conditions of employment, including methods of work, to the production of fatigue, having regard both to industrial efficiency and to the preservation of health among the workers." The board will initiate organization and promote by research, grants, or otherwise investigations in different industries, with a view to finding the most favorable hours of labor, spells of work, rest pauses, and other conditions applicable to the various processes according to the nature of the work and its demands on the workers. For these investigations the board looks forward to receiving the help of the employers and workmen in the industries which are studied, and in appropriate cases representatives of both will be invited to serve as temporary members of the board.

The board is composed as follows:

Dr. C. S. Sherrington, F. R. S., professor of physiology in the University of Oxford, chairman.
Dr. E. L. Collis, director of welfare and health, Ministry of Munitions.
Sir Walter Fletcher, M. D., F. R. S., secretary medical research committee.
Mr. W. L. Hichens, chairman of Messrs. Cammell, Laird & Co. (Ltd.).
Mr. Edward Hopkinson D. Sc., director of Messrs. Mather & Platt, Manchester.
Mr. Kenneth Lee, director of Messrs. Tootal, Broadhurst Lee Co. (Ltd.).
Dr. T. M. Legge, C. B. E., H. M. medical inspector of factories.
C. S. Myers, M. D., F. R. S., director of the psychological laboratory, Cambridge.
Mr. R. R. Bannatyne, assessor representing the home office.
Mr. D. R. Wilson, H. M. inspector of factories, secretary.

[1] From "The study of industrial fatigue" in the British Medical Journal, Dec. 28 1918, p. 738.

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MEMORANDUM ON STUDIES OF INDUSTRIAL FATIGUE.

When war was declared by this country, a committee on industrial fatigue was appointed by the advisory commission on labor of the Council of National Defense. This committee consisted of the following membership:

Thomas Darlington, chairman, secretary welfare committee, American Iron and Steel Institute.

Frederic S. Lee, executive secretary, professor of physiology, Columbia University; consulting physiologist, Public Health Service.

Robert E. Chaddock, associate professor of statistics, Columbia University.

Raymond Dodge, professor of psychology, Wesleyan University.

David L. Edsall, professor of clinical medicine, Harvard Medical School.

P. Sargant Florence, organizing secretary of the fatigue committee of the British Association for the Advancement of Science.

Josephine Goldmark, publication secretary, National Consumer's League.

Ernest G. Martin, professor of physiology, Leland Stanford University; scientific assistant (physiologist), Public Health Service.

J. W. Schereschewsky, surgeon, in charge of investigations of occupational diseases, Public Health Service.

Ernest L. Scott, associate in physiology, Columbia University; captain, Sanitary Corps, United States Army.

The representative of the Public Health Service on this committee was Surg. J. W. Schereschewsky. The committee immediately determined to investigate the relation of overfatigue to production of war materials in this country, and requested the Public Health Service to furnish the necessary funds and personnel to make these studies. In accordance with this request, work was immediately begun by the Public Health Service on July 17, 1917, under the immediate direction of Prof. Frederic S. Lee, a member of the committee who was created a consultant of the Public Health Service.

Work is still being continued by the service under the direction of Prof. Lee, assisted by the following consultants and members of the Public Health Service:

P. Sargant Florence, supervising field investigator.
Josephine Goldmark, special expert.
A. H. Ryan, scientific assistant.
Ernest G. Martin, physiologist.
Mary D. Hopkins, scientific assistant.
Albert B. Hastings, assistant sanitary chemist.
Ella C. Boyer, scientific assistant.
T. V. Brosnahan, scientific assistant.
Genevieve Brown, scientific assistant.
Hazel Darrow, scientific assistant.
Louise C. Eisenhardt, scientific assistant.
Elsie M. Frank, scientific assistant.
E. M. Martin, scientific assistant.
Elsie F. Smith, scientific assistant.
A. B. Yates, scientific assistant.
H. J. Ziegler, scientific assistant.

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SOME OBSERVATIONS ON MENTAL DEFECTIVENESS AND MENTAL RETARDATION AMONG CHILDREN.

By WALTER L. TREADWAY, Passed Assistant Surgeon, United States Public Health Service.

The popularity and simplicity of certain formal psychological tests has led some to rely implicitly on them for diagnosing the condition known as feeble-mindedness. By such a method an artificial standard has been fixed whereby an individual grading below a certain point has been classified as feeble-minded and above such a point as normal. In fact, however, at least among children, no distinct demarcation exists between the so-called higher types of feeble-mindedness on the one hand and normal mentality on the other. Nature's method is one of gradation; shading, as it were, all her activities from one complexion to another. Moreover, the routine application of the formal psychological tests by untrained persons may readily lead to serious mistakes by classifying as feeble-minded, children whose mental development has merely been retarded.

Binet[1] and Simon, in discussing the psychology of the feeble-minded child, point out that he does not resemble a normal child whose mental development is simply retarded. In the case of the former, they say, the retardation has not been uniform, showing as an end result a greater development of intelligence in some respects than in others. Binet and Simon, therefore, conclude that the mental equipment of the feeble-minded lacks equilibrium or proper balance. They also state that feeble-minded children, while they resemble, by reason of retarded intellect, much younger normal children, show defects of reasoning, understanding and imagination which do not appear in the latter. These authors are of the opinion that the mental powers of the feeble-minded child show individual peculiarities of a pathological kind.

Howe claimed that mental defectives resemble the insane in that they both show intellectual or moral degradation or a combination of the two. Hoffbauer thought this was true in the case of the higher grade mental defectives, because he considered that their powers of judgment were clouded with evil and because they had passionate attacks of anger. It appears that a number of classifications have been devised which confound insanity and mental deficiency. This confusion is partly explained by the fact that certain peculiarities of make-up or affective reactions which put the individuals out of harmony with their environment show a more or less low grade of intelligence when an intelligence scale or other psychological test for grading of intelligence is applied. The relationship, therefore, between the higher grade feeble-minded and

[1] Binet and Simon, "Mentally Defective Children." Authorized translation by W. B. Drummond. Published by Edw. Arnold, 1911.

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the insane is closer than it would first appear to those unacquainted with psychiatric problems.

There has long been an insistent demand on the part of psychiatrists that the facts be faced and that the existence of a borderland group which bridges the gap between a condition of feeble-mindedness and normality be recognized. Among this borderland group are certain individuals whose constitutional make-up is so badly adjusted to the demands of society that it brings them within the purview of the criminal code or leads to conflict with certain conventional standards. Among medical men, and especially those experienced in the care, treatment, and management of the insane, it has long been recognized that a number of these borderland cases become insane in after life or are classed as so-called criminals whose paths may eventually lead to hospitals for the insane. This "psychopathic twilight zone" between feeble-mindedness and insanity on the one hand and normality on the other is, after all, spanned by a bridge of few arches. The understanding of them constitutes one of the many problems in mental hygiene and is a problem best to be solved by one having a knowledge of clinical psychiatry. Psychiatric knowledge is, therefore, to be regarded as an essential requisite for one who would diagnose the higher types of feeble-mindedness. But this is not all. The work demands, in addition, sound medical knowledge.

A number of years' experience in the mental examination of American school children has revealed the fact that inanition and auditory defects retard proper mental development. Disorders of the nose and throat that induce inflammatory diseases of the middle ear also act indirectly as a cause of mental retardation. Those who deal with educational problems should therefore appreciate the fact that reliance can not be placed upon formal, psychological tests for diagnosing the higher grade cases. In this connection it may be stated that the Binet-Simon scale for grading intelligence (or its many modifications which have so many points in common) are fairly reliable for the purpose intended—the grading of intelligence. Moreover, although many things besides mental defectiveness modify the results of these tests, this is not a fault of the tests.

The application of these tests to a large group of American school children living under varying social and economic conditions has shown that many normal children—normal from the standpoint of school work—grade either one year in advance or one year behind their chronological age. Thus, it was found that the 6, 7, 8, and 9 year old children graded either regular, one year advanced, or one year retarded. In the case of children 10, 11, and 12 years old, chronologically, large numbers graded either regular, one year advanced, or one or two years retarded. The 14, 15, and 16 year old

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children graded largely within the limits of 11 and 15 years, mentally, and those of 17 to 20 years of age graded from 12 to adult.

The grading of children by these tests gives one, for educational purposes, and in a comparatively short time, an insight into their mental capacity. The results, moreover, are usually correct to within one year. To obtain similar results by observation methods usually requires a much longer period of time. It may therefore be concluded that the Binet-Simon scale is a desirable adjunct in the rapid classification of the intelligence of a group of individuals for pedagogical reasons and that it fulfills the need for which it was intended.

The results of an intensive study conducted by the United States Public Health Service of 2,185 rural school children indicate that the limits of normal intelligence, as shown by grading with the Binet-Simon scale, become wider as the higher chronological ages are reached. With the approach of adolescence the mental equipment becomes more complex and is less accurately measured by an arbitrary scale than it is in early childhood. Thus it is found that children of 6 years who are 4, mentally, of 7 who are 5, of 8 who 5 or 6, of 9 who are 6 or 7, of 10 who are 6 or 7, of 11 who are 7 or 8, of 12 or 13 who are 8 or 9, of 14 or 15 who are 9 or 10, of 16 who are 10, of 17 to 20 who are 11, are classified as retarded children and are considered as a borderland feeble-minded group. Below this group are the definitely feeble-minded whose mental development will never be greater than that of a child.

In this connection it is important to consider the age of the individual graded and to bear in mind the rate of mental progress which attends the different periods of life. Unfortunately there is at present no accurate means of measuring the rate of mental progress. It is well known, however, that the rate is rapid for the first few years of life, but becomes slower as maturity is approached. The difference in the mental development of a normal 2-year-old child and one 3 years old is readily recognized. This difference becomes difficult to note between the ages of 6 and 7, and between 11 and 12 years of age the recognition of mental differences by ordinary observation is quite impossible. Mental development during any one-year period does not represent accurately a unit of mental growth, because the older the child the less is the rate of mental development and the less noticeable is the retardation in any one-year age period.

Moreover, retardation in very young children presents two possibilities. In the first place, when conditions are favorable owing to the greater number of years intervening before maturity, these children eventually may attain normal mental development. On the other hand, when conditions are unfavorable, retardation may accumulate and become increasingly evident with advancing age.

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In consequence, the ultimate mental development of young children thus classified can not be foretold.

The problem is not so complex, however, in the case of adults or individuals who have reached a chronological age at which the rate of mental development is slower. Retardation below a certain point can not be overcome in the short time intervening before maturity at the slower rate of development, and the mental status in these cases may be determined with a fair degree of certainty.

In attempting to decide whether or not a given case of retarded mental development is feeble-minded, inquiry is usually made as to possible hereditary influences. Heredity, no doubt, plays a part as a cause of mental retardation, but exactly how this operates is not at present clearly understood. In some of these individuals it may be found that one or more of the antecedents are insane, feeble-minded, epileptic, nervous, criminal, addicted to alcohol or drugs, or that they manifest other less marked, antisocial tendencies. On the other hand, a number of the antecedents may be found to be intellectually brilliant and to be playing an important part in shaping the progressive activities of a community. Moreover, it is not uncommon to find that one or more brothers or sisters of these retarded cases are either mentally retarded or very brilliant; in the latter case bordering on genius. Unfavorable heredity, therefore, is not sufficiently understood to draw conclusions as to whether or not these retarded cases are definitely feeble-minded. It is a factor, however, and the person with such heredity should be regarded as possessing the so-called "neuropathic taint."

A number of those with this so-called neuropathic predisposition have been agitators of reforms that were considered irregular or far in advance of their time. Many of them appear to follow the by-paths of thought and seem to have a genius for looking at things in a different manner from that in which those untainted by such heredity look. In consequence they have left behind them gems in literature, music, and art, and have led and advocated social reforms that changed the moral conduct of man, and exercised good influences over his activities and thoughts. However, before conclusions can be reached in regard to the eventual mental outcome of the borderland cases, study and observation are necessary. It is already known that, among individuals who are classed as borderland cases, there are some in whom faulty habits of training are responsible for mental retardation. Environment also plays a part in its production, but how much and in what way it operates are not well understood. One need but turn to the history of democracy to find it replete with great men and women who have come from what is regarded as untoward environments. Limited educational opportunities also

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play a part in the failure of certain individuals to score a high mark when graded by formal psychological tests. These are the cases that have been classed as "dull but not tainted."

Therefore, before a mentally retarded individual is definitely diagnosed as feeble-minded, it is necessary to learn something of his total mental make-up. This should include, besides a knowledge of his heredity, environment, and educational opportunities, an examination of his grasp of general and school knowledge, his efforts or energy output, and, in fact, an understanding of his whole personality and developmental history, physical as well as mental. Such a knowledge is also important from the standpoint of understanding traits of character that are potentially good or bad for adaptation to the more or less complex situations of life. Moreover, it permits the adoption of suitable training methods to develop the desirable traits and to restrain or overshadow the undesirable ones.

During the past few years earnest efforts have been expended in the study of these traits of character, efforts which have pointed the way to a better understanding of the borderland cases. When this knowledge has become perfected the psychopathic twilight zone will have been traversed and mental hygiene will come to occupy an enviable position in preventive medicine.

MANUAL OF MENTAL EXAMINATION OF ALIENS.

Those concerned with the problems presented by mental disease, and that should include health officers throughout the United States, will be interested in learning how the Public Health Service guards against the immigration of aliens suffering from mental disease or mental defect. The method of examination and the various procedures by which this undesirable class of prospective immigrants is excluded are well described in a "Manual of the Mental Examination of Aliens," prepared under the direction of the Surgeon General and just published by the Public Health Service. Health officers will do well to ponder the following paragraph taken from this manual, summarizing as it does the chief reasons for regarding mental hygiene as an important public health activity:

Of all the serious problems in the field of public health activity, that of the mental examination of arriving aliens is one of the most important, and the detection of the insane and the mentally defective among arriving aliens and the prevention of their entry has a value that, from the standpoint of national welfare, can hardly be overestimated. Physical disability may give rise to dependency, but with the death of the individual the Nation is relieved of the burden. In the case of the insane or mentally defective there is imposed a burden which tends to perpetuate itself. Each mental defective may become the progenitor of a line of paupers, vagrants, criminals, or insane persons which will terminate only with the extinction of the race. Were

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the expense to be purely financial it would be deplorable enough, but to the cost in dollars and cents must be added the ever-present moral degeneracy and its pernicious influence upon society.

The manual contains 112 pages and gives practical instruction to guide inexperienced medical officers in the application of their knowledge of mental disease and defects. Copies may be obtained by writing to the Surgeon General, United States Public Health Service, Washington, D. C.

COOPERATION OF PHYSICIANS IN VENEREAL DISEASE CONTROL WORK.

The Venereal Disease Division of the Public Health Service has, in addition to its propaganda among druggists as mentioned in Public Health Reports of April 4, also circularized physicians with pledge cards. Agreement cards containing the following pledges were mailed to 131,830 physicians in the United States:

"1. To report my venereal disease cases in accordance with the laws and board of health regulations of my State.

"2. To secure prompt treatment for all venereal cases that come to me, either treating them myself or referring them to a clinic or physician known by me to be competent in the treatment of such cases.

"3. Not to dispense medicines which I prescribe in venereal cases, except when they can not be obtained from a drug store; and not to recommend, prescribe, or sell any proprietary remedy marketed for the self-treatment of venereal disease.

"4. To give to every venereal disease patient a circular of instructions, a supply of which is to be furnished me free of charge by the United States Public Health Service or my State board of health."

By March 15, 50,271 cards signed by physicians had been returned to the bureau and large numbers are being received each day. The revised Manual for Treatment of Venereal Diseases will be sent to each physician signing the card, either by the State board of health or by the Public Health Service. The success of the entire venereal disease control program depends almost entirely upon the support that is given to it by the physicians of the country. The signed cards of physicians will likewise be turned over to the State health officers, so that the venereal disease control program in each State may be carried on by the proper local authorities.

The Public Health Service is endeavoring to decentralize this work as much as possible and have the State and local health authorities assume the leadership, supervision, and responsibility for the work in their respective districts.

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DEATHS DURING WEEK ENDED MARCH 29, 1919, IN CITIES.

The following table shows the registered deaths from all causes, and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended March 29, 1919. The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown.

The data are taken from the "Weekly Health Index," April 1, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended Mar. 29, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	52	24.1	C 20.4	12	5.6
Atlanta, Ga.	201,732	46	11.9	C 16.0		
Baltimore, Md.	[2]69,981	212	16.5	A 22.2	23	2.6
Boston, Mass.	785,245	239	15.9	A 18.0	35	2.3
Buffalo, N. Y.	473,229	154	17.0	C 19.9	12	2.6
Cambridge, Mass.	111,432	21	9.8	A 16.2	3	1.4
Chicago, Ill.	2,596,681	733	14.7	A 17.1	109	4.4
Cincinnati, Ohio.	418,022	178	22.2	C 19.5	20	2.6
Cleveland, Ohio.	610,306	265	17.1	C 12.9	34	2.9
Columbus, Ohio.	225,296	82	19.0	C 15.3	27	6.3
Dayton, Ohio.	130,655	57	22.7	C 16.4	14	5.6
Denver, Colo.		81				
Fall River, Mass.	128,392	36	14.6	C 17.9	12	4.9
Grand Rapids, Mich.	135,450	30	11.6	C 13.1		
Indianapolis, Ind.	289,577	135	24.3	C 18.7		
Jersey City, N. J.	318,770	122	20.0	C 22.7		
Kansas City, Mo.	313,785	115	19.1	C 27.3	44	7.3
Los Angeles, Cal.	568,496	160	14.7	A 13.7	23	1.9
Louisville, Ky.	242,707	125	26.9	C 20.6	65	14.0
Lowell, Mass.	109,681	37	17.7	A 18.3	5	2.4
Memphis, Tenn.	154,759	78	26.3	C 27.6	17	5.7
Milwaukee, Wis.	453,481	134	15.4	A 16.1	41	4.7
Minneapolis, Minn.	383,442	112	15.2	C 12.9		
Nashville, Tenn.	119,215	43	18.8	C 21.9	12	5.3
Newark, N. J.	428,684	135	16.9	C 23.2	41	5.0
New Haven, Conn.	154,865	35	11.8	C 18.9	7	2.4
New Orleans, La.	382,273	108	14.7	A 21.9	20	2.7
New York, N. Y.	5,215,879	1,751	17.5	C 23.8	436	4.3
Oakland, Cal.	214,206	50	12.2	A 11.2		
Omaha, Nebr.	180,264	43	12.5	C 9.5		
Philadelphia, Pa.	1,761,371	583	17.3	[3]18.6	127	3.9
Pittsburgh, Pa.	593,303	256	22.5	C 22.2	103	9.1
Portland, Oreg.		71			9	
Providence, R. I.	263,613	74	14.6	C 27.7	13	2.6
Richmond, Va.	160,719	64	20.8	C 16.5	11	3.6
Rochester, N. Y.	264,856	76	15.0	C 15.0	14	2.9
St. Louis, Mo.	779,961	252	16.8	C 17.4	77	5.1
St. Paul, Minn.	257,099	74	15.0	C 16.8		
San Francisco, Cal.	478,530	144	15.7	C 20.4	15	1.6
Seattle, Wash.		74			10	
Spokane, Wash.		42				
Syracuse, N. Y.	161,404	40	12.9	C 19.7	5	1.6
Toledo, Ohio.	262,234	101	20.1	A 15.3	44	8.7
Washington, D. C.	401,681	114	14.8	A 21.6	20	2.6
Worcester, Mass.	173,650	67	20.1	C 19.5	12	3.6

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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EPIDEMIC INFLUENZA.

PREVALENCE IN THE UNITED STATES.

Telegraphic reports for the week ended April 4, 1919, received by the Public Health Service indicate little change in the number of cases of influenza throughout the United States. The number of cases reported in the State of California is considerably greater than that for the preceding week. (See p. 745.)

The reports from zones around Army camps show a decline in the number of cases as compared with the week ended March 29. (See p. 749.)

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED APR. 5

CAMP DEVENS ZONE, MASS.

	Cases.
Influenza:	
Lunenburg	1
Pneumonia, lobar:	
Ayer	1
Whooping cough:	
Lancaster	2

CAMP DIX ZONE, N. J.

Diphtheria:	
Springfield Township	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

Cerebrospinal meningitis	1
Cancer	1
Chicken pox	1
Gonorrhea	1
Measles	13
Pneumonia, broncho	3
Pneumonia, lobar	1

CAMP FUNSTON ZONE, KANS.

Chicken pox:	
Manhattan	1
Diphtheria:	
Milford	1
Zeandale	1
Gonorrhea:	
Junction City	1
Manhattan	6
Influenza:	
Cleburne	21
Irving	1
Manhattan	1
Mumps:	
Junction City	1
Manhattan	7
Pneumonia:	
Junction City	1
Scarlet fever:	
Green	2
Junction City	1
Manhattan	4
Rural district	1
Smallpox:	
Manhattan	1

GAS AND FLAME SCHOOL ZONE, GA. AND S.

Bibb City:	
Diphtheria	
Smallpox	
Columbus:	
Gonorrhea	
Measles	
Smallpox	
Syphilis	
Tuberculosis	
Whooping cough	
Muscogee County:	
Dysentery	
Influenza	
Pellagra	
Smallpox	

CAMP GORDON ZONE, GA.

Atlanta:	
Chancroid	
Chicken pox	
Diphtheria	
Gonorrhea	
Hookworm	
Influenza	
Malaria	
Measles	
Mumps	
Pneumonia	
Scarlet fever	
Smallpox	
Syphilis	
Tuberculosis	

GULFPORT HEALTH DISTRICT, MISS.

Cerebrospinal meningitis:	
Long Beach	
Gonorrhea:	
Gulfport	
Miscellaneous	
Hookworm:	
Escatawpa	
Lyman	
Influenza	
Biloxi	

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GULFPORT HEALTH DISTRICT, MISS.—continued.

	Cases.
Malaria:	
Escatawpa	1
Logtown	1
Lyman	1
Moss Point	3
Pascagoula	2
Mumps:	
Gulfport	2
Handsboro	7
Hurley	1
Mississippi City	7
Moss Point	3
Pascagoula	1
Pellagra:	
Beauvoir	2
Pneumonia:	
Gulfport	2
Lyman	1
Moss Point	1
Pascagoula	1
Pneumonia, broncho:	
Logtown	1
Wade	2
Typhoid fever:	
Pass Christian	1
Whooping cough:	
Moss Point	1
Sancier	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	2
Mumps	2
Scarlet fever	1
Tuberculosis	1
Typhoid fever	1
Whooping cough	7
Government clinic:	
Chancroid	1
Gonorrhea	25
Syphilis	24

CAMP LEE ZONE, VA.

Gonorrhea:	
Petersburg	4
Influenza:	
Prince George County	2
Measles:	
Petersburg	2
Mumps:	
Hopewell	1
Prince George County	1

CAMP LEWIS ZONE, WASH.

Mumps:	
Parkland	1
Smallpox:	
Spanaway	1

CAMP MERRITT ZONE, N. J.

Closter:	
Scarlet fever	1
Englewood:	
Chicken pox	1
Influenza	1
Pneumonia	1

MUSCLE SHOALS SANITARY DISTRICT, ALA.

	Cases.
Colbert County:	
Cerebrospinal meningitis	2
Chicken pox	6
Scabies	2
Typhoid fever	1
Lauderdale County:	
Chicken pox	1
Smallpox	1
Whooping cough	2
Nitrate plant No. 2:	
Chancroid	16
Gonorrhea	35
Influenza	1
Mumps	7
Pneumonia	1
Syphilis	11
Tuberculosis	2

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	3
Measles	2
Mumps	2
Pneumonia	2
Syphilis	3

CAMP PIKE ZONE, ARK.

Levy:	
Malaria	1
Little Rock:	
Chicken pox	13
Erysipelas	1
Gonorrhea	20
Influenza	5
Malaria	4
Measles	2
Mumps	2
Pneumonia	5
Scarlet fever	6
Syphilis	11
Tonsilitis	2
Tuberculosis	2
Typhoid fever	1
Whooping cough	1
North Little Rock:	
Membranous croup	1
Tuberculosis	1

CAMP POLK ZONE, N. C.

Chicken pox:	
Durham	7
Raleigh	6
Raleigh Township	3
Diphtheria:	
Cary Township	1
Gonorrhea:	
Wake Forest Township	2
Measles:	
Durham	10
Durham Township	4
Raleigh	1
Mumps:	
Durham	12
Raleigh	1

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[illegible] NORFOLK COUNTY HEALTH DISTRICT, VA.

.....	2
.....	7
.....	1
.....	2
.....	1
.....	1
.....	3

[illegible] SHERIDAN ZONE, ALA.

[illegible]linic:

[illegible]	8
.....	10
[illegible]nal meningitis	1
Scarlet fever	1

CAMP SHERMAN ZONE, OHIO.

Gonorrhea:	
Government clinic	2
Influenza:	
Chillicothe	1
Ross County	15
Scarlet fever:	
Chillicothe	1

SOUTHER FIELD ZONE, GA.

No cases of communicable diseases reported.

CAMP ZACHARY TAYLOR ZONE, KY. AND IND.

Chicken pox:	
Louisville	2
Diphtheria:	
Louisville	6
Gonorrhea:	
Government clinic	21
Louisville	3
Jail clinic	10
Influenza:	
Jefferson County	11
Louisville	22
Measles:	
Jefferson County	6
Louisville	9
Pneumonia, lobar:	
Louisville	2

TIDEWATER HEALTH DISTRICT, VA.

Government clinic:	
Chancroid	1
Gonorrhea	13
Syphilis	3
Newport News:	
Cerebrospinal meningitis	1
Measles	2
Mumps	1
Pneumonia	1
Scarlet fever	1
Tuberculosis	2
Varioloid	1
Phoebus:	
Mumps	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chancroid	1
Gonorrhea	9
Pellagra	1
Pneumonia	1
Scarlet fever	1
Smallpox	1
Syphilis	6
Tuberculosis	2
Typhoid fever	1

CAMP UPTON ZONE, N. Y.

Brook Haven:	
Diphtheria	1
Measles	1
Pneumonia	2
Riverhead:	
Chicken pox	3
German measles	1
Pneumonia	1

WILMINGTON SANITARY DISTRICT, N. C.

Castle Hayne:	
Scarlet fever	1
Tuberculosis	1
Wilmington:	
Measles	2
Mumps	1
Pneumonia	2
Scarlet fever	1
Tuberculosis	7
Typhoid fever	3

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DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended March 28, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	705.60	971.07
All troops in the United States	1,309.41	1,272.48
American Expeditionary Forces	501.54	865.00
Annual admission rate per 1,000 (disease only):	612.58	832.15
All troops in the United States	1,086.26	1,064.57
American Expeditionary Forces	452.48	750.36
Noneffective rate per 1,000 on day of report	45.25	48.40
All troops in the United States [1]	60.50	58.65
American Expeditionary Forces	40.09	44.80
Annual death rate per 1,000 (all causes)	8.91	10.57
All troops in the United States [1]	9.10	10.18
American Expeditionary Forces	8.84	10.71
Annual death rate per 1,000 (disease only)	7.26	8.86
All troops in the United States	7.96	9.79
American Expeditionary Forces	7.02	7.89

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

Cases of special diseases reported during the week ended Mar. 28, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
				Total.	New infections.						
Bowie	2	.....	.....	26	7	1	2	.....	.....	2,405.55	121.22
Bragg	.....	.....	.....	.....	.....	.....	.....	.....	.....	431.08	18.65
Custer	5	.....	.....	22	12	.....	.....	.....	1	1,088.73	105.01
Devens	3	1	.....	24	.....	.....	.....	1	.....	194.51	79.23
Dix	1	.....	.....	24	7	.....	11	.....	.....	625.06	88.68
Dodge	2	.....	.....	8	8	6	.....	.....	5	1,028.79	133.21
Eustis	1	.....	1	6	.....	2	1	.....	.....	1,250.92	41.96
Fremont	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,338.55	37.20
Funston	.....	.....	.....	6	.....	3	.....	.....	2	483.24	61.70
Gordon	3	.....	.....	85	.....	8	.....	.....	.....	1,973.09	103.55
Grant	6	.....	.....	5	.....	.....	13	.....	4	1,347.60	73.80
Greene	.....	.....	.....	.....	.....	.....	.....	.....	.....	126.21	.....
Hancock	.....	.....	.....	.....	.....	.....	.....	.....	.....	488.43	.....
Humphreys	1	.....	.....	4	2	4	.....	.....	.....	412.01	30.22
Jackson	2	.....	3	38	.....	.....	.....	.....	.....	923.90	66.51
Kearny	1	.....	.....	7	4	.....	.....	.....	.....	1,514.17	133.20
Henry Knox	5	.....	.....	1	.....	.....	.....	.....	.....	247.19	13.46
Las Casas	.....	1	1	2	.....	.....	.....	.....	.....	1,052.09	41.47
Lee	2	.....	.....	34	4	.....	.....	.....	.....	1,032.17	93.41
Lewis	1	.....	.....	5	4	1	1	1	.....	1,574.17	110.47
McClellan	.....	.....	.....	2	.....	.....	.....	.....	.....	495.82	30.98
Meade	7	.....	.....	21	9	.....	.....	.....	1	1,034.32	80.19
Pike	2	.....	1	31	.....	.....	.....	.....	.....	1,496.31	107.72
Sevier	.....	.....	.....	.....	.....	.....	.....	.....	.....	584.26	8.17
Shelby	.....	.....	.....	10	6	1	.....	.....	.....	2,010.61	79.85
Sherman	2	.....	.....	33	3	6	.....	.....	1	874.56	107.20
Taylor	11	.....	.....	8	4	13	4	.....	4	1,081.83	120.45
Travis	.....	.....	4	22	2	.....	.....	.....	.....	860.62	71.92
Upton	2	.....	.....	18	3	14	.....	.....	.....	901.58	51.49
Wheeler	.....	.....	.....	.....	.....	.....	.....	.....	.....	78.78	1.51

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Cases of special diseases reported during the week ended Mar. 28, 1919—Continued.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate (per 1,000 on day of report.
Northeastern Department	1			4	2						
Eastern Department	3			22	2	3			3		
Southeastern Department	1			5	2					1	
Central Department				10					2		
Southern Department	13			46	7	93			1		
Western Department	2		1	15	11	7	1				
Aviation camps	2			28		6			1		
Ports of embarkation:											
Hoboken	12	2		12	8	62	3	3	2		
Newport News	40		1	90	14	46	6	2	3	5	
Alcatraz, disciplinary barracks											
Leavenworth, disciplinary barracks			2	5						1	
Columbus Barracks									2		
Jefferson Barracks	3			8	8	2				1	
Fort Logan				1	1						
Fort McDowell				11		1				2	
Fort Sill				8	8				2		
Fort Slocum				2							
Fort Thomas							1				
West Point										1	
Arsenals				17							
Miscellaneous small stations				5		2					
Total	136	4	14	741	138	281	43	7	33	1,0	

Number of deaths and annual rates per 1,000 at large camps in the United States week ended Mar. 28, 1919.

Camp.	Strength.	Deaths. All causes.	Deaths. Disease only.	Annual death rate per 1,000. All causes.	Annual death rate per 1,000. Disease only.
Bowie	5,400				
Bragg	965				
Custer	6,018	1	1		
Devens	8,822	2	2	11	11
Dix	13,6				
Dodge	9,0				
Eustis	5,6				
Fremont	4				
Funston	6,574				
Gordon	7,8	1	1	6	6
Grant	14,201	1	1	3	3
Greene	12				
Hancock	1,781				
Humphreys	5,127				
Jackson	8,555				
J. E. Johnston	391				
Kearny	3,5				
Henry Knox	7,5				
Las Casas	1,9	1	1	26	26
Lee	10,6				
Lewis	6,9	1	1	7	7
McClellan	8				
Meade	13,6	2	2	7	7
Pike	8,410	1	1	6	6
Sevier	9				
Shelby	3,9				
Sherman	12,0				
Taylor	14,121	1	1	3	3
Travis	9,607	3	3	16	16
Upton	19,429	5	4	13	10
Wheeler	6				
Northeastern Department	4,219	1	1	12	12

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Number of deaths and annual rates per 1,000 at large camps in the United States, week ended Mar. 28, 1919—Continued.

Camp.	Strength.	Deaths.		Annual death rate per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Eastern Department	24,733	.....	.....	.....	.....
Southeastern Department	6,529	.....	.....	.....	.....
Central Department	5,515	5	3	47.14	28.29
Southern Department	34,652	5	5	7.50	7.50
Western Department	11,253	2	2	9.24	9.24
Aviation camps	27,981	6	1	11.15	1.85
Ports of embarkation:					
Hoboken	20,875	6	6	6.13	6.13
Newport News	29,720	12	12	20.99	20.99
All others	95,153	32	29	17.48	15.84
Total	502,411	88	77	9.10	7.96

Annual admission rate per 1,000 for certain diseases.

Diseases.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	14.07	10.38	17.71	32.92
Dysentery	.41	.09	.28	.37
Malaria	1.44	.97	.10	.03
Venereal	76.69	68.64	35.33	46.27
Paratyphoid	.....	.....	.28	.02
Typhoid	.31	.19	1.78	1.10
Measles	4.45	6.26	2.06	2.61
Meningitis	.72	1.07	2.13	2.75
Scarlet fever	3.41	3.72	.69	1.20
Influenza	29.08	24.48	.....	.....

CURRENT STATE SUMMARIES.

Telegraphic Reports for the Week Ended April 5, 1919.

Alabama.—State totals: Typhoid fever 2, malaria 5, smallpox 2, measles 30, diphtheria 4, influenza 55.

Arkansas.—State totals: Malaria 70, measles 39, whooping cough 20, smallpox 18, influenza 20, tuberculosis 16, pellagra 6, chicken pox 6, diphtheria 5, trachoma 5, typhoid fever 3, meningitis 1.

California.—Influenza cases reported, 820. Smallpox: 34 cases, of which in San Francisco 3, Santa Cruz County 4, Sacramento 3, Marysville 8, Chico 6, remainder scattered over State. Typhoid fever: 8 cases, of which in San Francisco 2, Oakland 2, one each in San Bernardino, Monterey, Tulare County and Covina. Cerebrospinal meningitis: Oakland 1, Los Angeles 1. Lethargic encephalitis: Tulare County 1, Stockton 1, Palo Alto 1.

Connecticut.—No outbreak or undue prevalence. Influenza, total for State 23.

Florida.—State totals: Typhoid fever 11, paratyphoid fever 1, malaria 3, diphtheria 4, pneumonia 9, epidemic meningitis 1.

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Georgia.—State totals: Acute infectious conjunctivitis 7, hookworm 5, cerebrospinal meningitis 2, chickenpox 42, diphtheria 9, dysentery (amebic) 2, dysentery (bacillary) 4, German measles 5, gonorrhea 102, influenza 96, malaria 53, measles 82, mumps 61, paratyphoid fever 3, pneumonia (acute lobar) 64, rabies (in animal) 1, scarlet fever 12, septic sore throat 17, smallpox 68, syphilis 46, trachoma 1, tuberculosis (pulmonary) 26, tuberculosis (other than pulmonary) 4, typhoid fever 5, whooping cough 34.

Illinois.—Diphtheria: Cases reported 179, of which in Chicago 134, Camp Grant 8, Lagrange 7. Scarlet fever: Cases reported 140, of which in Chicago 68, Ogle County (Buffalo township) 10, Lake Bluff 7, Camp Grant 8, Rockford 6, Oglesby 5. Smallpox: Cases reported 108, of which in Aurora 38, Champaign 9, Pekin 7, Mill Shoals 6 Canton 6, East Peoria 5. Meningitis: Chicago 5, Freeburg 1. Gonorrhea 189, syphilis 175, influenza 316, of which in Chicago 171. A recrudescence of influenza in following communities: Virginia 20, Champaign County (Scott Township) 19, Carthage 33. Lethargic encephalitis: Chicago 4, one each in the following: Milford, Lake County (Antioch Township), Macomb, North Chicago, Duquoin, and Sidell.

Indiana.—Scarlet fever in Montgomery, Delaware, Wabash, Marshall, and Jay Counties, Columbia City and South Bend. Smallpox in Delaware, Vermilion, Clinton, and Elkhart Counties, Anderson Laporte, and Columbia City. Diphtheria by counties: Vermilion 3 Clinton 2, Wabash 4, Delaware 2, Elkhart 2, Tipton 1, Knox 1, Miami 2, Wayne 1, Monroe 2, Tippecanoe 5; in Lagrange many. Typhoid fever in Delaware, Elkhart, Shelby, Ripley, and Tipton Counties; in Indiana Harbor 3. Syphilis: Cases reported 33. Gonorrhea: Cases reported 59.

Iowa.—Cerebrospinal meningitis: Sumner 1. Chancroid: Cedar Rapids 1, Council Bluffs 1, Griswold 1. Chicken pox: Davenport 1. Diphtheria: Des Moines 4, Dubuque 1. Gonorrhea: Cedar Rapids 6 Council Bluffs 17, Davenport 7, Dubuque 5, Earlville 1, Griswold 2, Hawarden 2. Measles: Bellevue 10, Council Bluffs 5. Mumps Northwood 8. Scarlet fever: Bellevue 1, Des Moines 5, Dubuque 1 Ewart 1, Guttenberg 2, Mason City 1, Newton 1, Ottosen 1, Turin 5. Smallpox: Buffalo 6, Cedar Rapids 6, Clarinda 8, Council Bluffs 5, Davenport 12, Des Moines 1, Fort Dodge 1, Greenfield 1, Mason City 2. Syphilis: Council Bluffs 2, Griswold 1. In rural districts of following counties: Diphtheria: Buena Vista 1, Dallas 2, Dubuque 1, Kossuth 1, Washington 2. Scarlet fever: Appanoose 1, Decatur 1, Goodell 1, Hancock 2, Keokuk 1, Polk 3, Union 1, Wapello 1, Washington 2. Smallpox: Buchanan 2, Buena Vista 2, Calhoun 1, Cherokee 1, Osceola 1, Wapello 1. Influenza cases reported in State, 90.

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Louisiana.—State totals: Lethargic encephalitis 11, influenza 23, meningitis 6, typhoid fever 6, smallpox 61.

Maine.—Chancroid: Thomaston 1. Chickenpox: Bath 1, Portland 7. Diphtheria: Oldtown 1, South Portland 1, Waterville 2. Gonorrhea: Bangor 2, one each Biddeford, Calais, Camden, Fairfield, Millinocket, and Westbrook, Madison 2, Portland 18, Thomaston 2. Measles: Rockland 1, Dexter 6. Mumps: Bath 1. Scarlet fever: Farmington 9, Hudson 5, Phillips 5, Portland 7. Smallpox: Bath 1. Syphilis: Augusta, Danforth, and Lewiston 1 each, Portland 13. Tuberculosis: 10 cases. Typhoid fever: Cumberland 1, Mapleton 1. Influenza, 123 cases.

Minnesota.—Smallpox (new foci): 1 case in each of the following: Cadeton County (Atkinson Township), Clearwater County (Shevlin Township), Scott County (Eagle Creek Township), Wilkin County (Campbell village), Jackson County (Sioux Valley Township), 3. State totals: Cerebrospinal meningitis 1, syphilis 70, gonorrhea 110, chancroid 2.

New Jersey.—State totals: Influenza 478 cases reported and 190 cases pneumonia. One new case smallpox in West Cape May, 3 in Hamilton Township, and 5 in Weymouth Township (Atlantic County). No unusual prevalence of other diseases.

New York.—Outside of New York City. State totals: Typhoid fever 15, measles 409, of which in Albany County 52, Chemung County 50, Erie County 67, Niagara County 86. Scarlet fever 180. whooping cough 47, diphtheria 164. Smallpox: Buffalo 1, Rochester 1. Cerebrospinal meningitis 5, pneumonia 186. Voluntary reports: Syphilis 118, gonorrhea 22.

North Carolina.—State totals: Whooping cough 158, measles 299, diphtheria 25, scarlet fever 9, septic sore throat 3, smallpox 84, chicken pox 48, typhoid fever 6, epidemic meningitis 1, bronchopneumonia 26, lobar pneumonia 25, lethargic encephalitis 3, syphilis 15, gonorrhea 48, chancroid 2, gonorrhea and chancroid 1. Influenza cases reported by counties: Clay 25, Cleveland 100, Davidson 27, Gaston 2, McDowell 2.

Ohio.—Scarlet fever: Columbus, 16 cases. Smallpox continues in Lorain, Tuscarawas, Stark, Coshocton, Pike, Scioto, and Mahoning Counties and in the Miami Valley. Measles epidemic in Youngstown, Zanesville, Delphos, and Lorain. Influenza decreased. Encephalitis lethargic, 13 cases to date.

Oregon.—Influenza: Portland 13 cases (1 death), Clackamas 4, Linn 1, Marion 1, Tillamook 46.

Vermont.—Twelve towns report 78 cases of influenza. No other unusual prevalence.

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Virginia.—Influenza: Cases reported 9. Smallpox: Fairfax County 1, Tazewell County 2, Norfolk County 3, Alexandria County 3, Henry County several, Middlesex County 2, Frederick County 2.

Washington.—Unusual prevalence of contagious diseases reported. Smallpox: Hoquiam 9, Auburn 4, Seattle 30, Ellensburg 5, Eatonville 2, Tacoma 20, Olympia 5, Sunnyside 5, Yakima 12, Yakima (county) 18.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	1	Camp Sheridan zone, Ala	1
Gulfport health district, Miss	1	Tidewater health district, Va	1
Muscle Shoals sanitary district, Ala	2		

State Reports for February, 1919.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		California—Continued.	
Calhoun County	2	San Diego County	1
Cherokee County	2	San Francisco	1
Colbert County	1	Total	9
Cullman County	1		
Franklin County	1	Virginia:	
Greene County	1	Accomac County	2
Henry County	1	Frederick County	1
Jefferson County	7	Halifax County	1
Lee County	1	Hanover County	1
Marengo County	1	Henrico County—	
Marshall County	1	Richmond	1
Tuscaloosa County	1	Lee County	3
Total	20	Nansemond County	1
		Pittsylvania County	1
California:		Prince William County	1
El Dorado County	1	Spotsylvania County—	
Los Angeles County—		Fredericksburg	1
Los Angeles	1	Total	12
South Pasadena	1		

City Reports for Week Ended Mar. 22, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Appleton, Wis	1	1	New York, N. Y	8	7
Baltimore, Md		1	Philadelphia, Pa	4	2
Birmingham, Ala		1	Racine, Wis	1	
Boston, Mass	2	2	Riverside, Calif		1
Bridgeport, Conn		1	Rochester, N. Y	1	
Chicago, Ill	4	1	Saginaw, Mich	1	
Dallas, Tex		1	St. Louis, Mo	1	
Dayton, Ohio	1		San Antonio, Tex	1	1
Detroit, Mich	2		San Francisco, Calif	2	
Fort Worth, Tex	1		Seattle, Wash	1	
Indianapolis, Ind	1		Tuscaloosa, Ala	1	
Lancaster, Ohio		1	Washington, D. C		1
Los Angeles, Calif	1		Wheeling, W. Va		1
Milwaukee, Wis	2	2			

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CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga.	3	Tidewater health district, Va.	1
Camp Jackson zone, S. C.	1	Camp Travis zone, Tex.	1
Muscle Shoals sanitary district, Ala.	16		

DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Camp Dix zone, N. J.	1	Camp Polk zone, N. C.	1
Camp Funston zone, Kans.	2	Camp Zachary Taylor zone, Ky. and Ind.	6
Gas and flame school zone, Ga. and Ala.	1	Camp Upton zone, N. Y.	1
Camp Gordon zone, Ga.	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 758.

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	1	Picric acid plant zone, Ga.	3
Camp Funston zone, Kans.	7	Camp Pike zone, Ark.	20
Gas and flame school zone, Ga. and Ala.	6	Camp Polk zone, N. C.	2
Camp Gordon zone, Ga.	53	Camp Sheridan zone, Ala.	8
Gulfport health district, Miss.	5	Camp Sherman zone, Ohio	2
Camp Jackson zone, S. C.	25	Camp Zachary Taylor zone, Ky. and Ind.	34
Camp Lee zone, Va.	4	Tidewater health district, Va.	13
Muscle Shoals sanitary district, Ala.	35	Camp Travis zone, Tex.	9

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Camp Devens zone, Mass.	1	Muscle Shoals sanitary district, Ala.	1
Camp Funston zone, Kans.	23	Camp Pike zone, Ark.	5
Gas and flame school zone, Ga. and Ala.	2	Portsmouth and Norfolk County health district, Va.	2
Camp Gordon zone, Ga.	9	Camp Sherman zone, Ohio	16
Gulfport health district, Miss.	1	Camp Zachary Taylor zone, Ky. and Ind.	33
Camp Lee zone, Va.	2		
Camp Merritt zone, N. J.	1		

LEPROSY.

California Report for February, 1919.

During February 1 case of leprosy was reported at Los Angeles, Cal., in the person of E. H., an English woman born in the West Indies but having lived in the United States for the past eight and one-half years. The disease was diagnosed clinically February 19, and verified bacteriologically as tubercular and anesthetic. The patient is in the leper isolation quarters of the county hospital.

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LETHARGIC ENCEPHALITIS.

Cases Reported for Week Ended Apr. 5, 1919.

	Cases.
California:	
Tulare County	1
Palo Alto	1
Santa Cruz	1
Stockton	1
Illinois:	
Chicago	4
Duquoin	1
Macomb	1
Milford	1
North Chicago	1
Sidell	1
Antioch Township (Lake County)	1
Louisiana:	
Acadia Parish	1
Natchitoches Parish	1
Rapides Parish	2
Louisiana—Continued.	
Richland Parish	1
St. Marys Parish	1
New Orleans	4
State at large	1
Ohio:	
Lancaster (week ended Mar. 29)	1
State at large (to date)	12
Oklahoma:	
State at large (during March)	1
North Carolina:	
State at large	3
Texas:	
Beaumont (during March)	1
Calvert (during March)	1
Temple (during March)	1

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.
Camp Gordon zone, Ga.	1
Gulfport health district, Miss.	8
Camp Pike zone, Ark.	5

State Reports for February, 1919.

Place.	New cases reported.
Alabama:	
Barbour County	5
Calhoun County	1
Choctaw County	1
Colbert County	2
Jackson County	1
Jefferson County	1
Talladega County	5
Tuscaloosa County	16
Wilcox County	1
Total	33
California:	
Alameda County—	
Alameda	1
Butte County	1
Contra Costa County—	
Antioch	1
Glenn County—	
Willows	1
Los Angeles County—	
Los Angeles	1
San Francisco—	
Presidio	1
San Joaquin County—	
Stockton	1
Solano County—	
Dixon	2
Yolo County	1
Total	10
Virginia:	
Accomac County	4
Alexandria County—	
Alexandria	2
Augusta County	5
Virginia—Continued.	
Brunswick County	6
Brodnax	2
Franklin County	5
Gloucester County	6
Goochland County	6
Greene County	1
Halifax County—	
Clover	2
Isle of Wight County	12
James City County	2
King and Queen County	3
Lancaster County	1
Irvington	1
Lee County	1
Louisa County	1
Lunenburg County	3
Mecklenburg County	2
Middlesex County	9
Northampton County	4
Cape Charles	2
Northumberland County	4
Pittsylvania County	11
Powhatan County	1
Prince George County	1
Hopewell	2
Princess Anne County	5
Prince William County	2
Shenandoah County	2
Southampton County	1
Franklin	2
Stafford County	1
Surry County	1
Sussex County	3
Warwick County	3
York County	2
Total	137

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MALARIA—Continued.

City Reports for Week Ended Mar. 22, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga.	1		Memphis, Tenn.	2	
Brunswick, Ga.	1		Palestine, Tex.	6	
Hoboken, N. J.		1	Tuscaloosa, Ala.	2	

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	13	Portsmouth and Norfolk County health district, Va.	7
Gas and flame school zone, Ga. and Ala.	6	Camp Zachary Taylor zone, Ky. and Ind.	15
Camp Gordon zone, Ga.	10	Tidewater health district, Va.	2
Camp Lee zone, Va.	2	Camp Upton zone, N. Y.	1
Picric acid plant zone, Ga.	2	Wilmington sanitary district, N. C.	2
Camp Pike zone, Ark.	2		
Camp Polk zone, N. C.	15		

See also Diphtheria, measles, scarlet fever, and tuberculosis, p. 758.

PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Gas and flame school zone, Ga. and Ala.	3	Camp Travis zone, Tex.	1
Gulfport health district, Miss.	2		

State Reports for February, 1919.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		California:	
Autauga County	1	Orange County	1
Bibb County	2		
Butler County	2	Virginia:	
Chilton County	1	Accomac County—	
Coffee County	1	Parksley	1
Dallas County	1	Amherst County	1
Etowah County	1	Augusta County	1
Jackson County	2	Dinwiddie County—	
Jefferson County	7	Petersburg	1
Lauderdale County	1	James City County	1
Lee County	1	Tazewell County	1
Limestone County	1	Warwick County	2
Lowndes County	1		
Marengo County	1	Total	8
Mobile County	4		
Randolph County	1		
Tuscaloosa County	14		
Walker County	2		
Total	44		

City Reports for Week Ended Mar. 22, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlanta, Ga.		2	Los Angeles, Cal.	1	
Austin, Tex.		1	Memphis, Tenn.	1	
Beaumont, Tex.		1	Mobile, Ala.		3
Brunswick, Ga.	1		New Orleans, La.	1	
Buffalo, N. Y.		1	Oklahoma City, Okla.		1
Dallas, Tex.		2	Raleigh, N. C.		1
Durham, N. C.		2	Tuscaloosa, Ala.	1	
Fort Worth, Tex.		1			

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PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.
Camp Devens zone, Mass	1
Fayetteville sanitary district, N. C	4
Camp Funston zone, Kans	2
Camp Gordon zone, Ga	5
Gulfport health district, Miss	8
Camp Merritt zone, N. J	1
Muscle Shoals sanitary district, Ala	1
Picric acid plant zone, Ga	2
Camp Pike zone, Ark	8
Portsmouth and Norfolk County health district, Va	1
Camp Zachary Taylor zone, Ky. and Ind	2
Tidewater health district, Va	1
Camp Travis zone, Tex	1
Camp Upton zone, N. Y	3
Wilmington sanitary district, N. C	1

City Reports for Week Ended Mar. 22, 1919.

Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.
Akron, Ohio			3	
Appleton, Wis	1	1		
Atlanta, Ga			3	5
Atlantic City, N. J	1	1		
Attleboro, Mass	1	1		
Baltimore, Md	23	16		
Baton Rouge, La			2	
Belleville, N. J	2			
Beverly, Mass	1	1		
Boston, Mass	43	18		
Brockton, Mass	2	1		
Brunswick, Ga	4			
Cadillac, Mich	1	1		
Cambridge, Mass	4	3		
Camden, N. J			9	
Charleston, W. Va	2	1		
Charlotte, N. C	3	2		
Chelsea, Mass	2			
Chicago, Ill			300	131
Chicopee, Mass	1	2		
Cleveland, Ohio	60	71		
Cumberland, Md	1			
Dayton, Ohio	3	8		
Detroit, Mich	15	36	21	53
Dover, N. H	1	1		
Duluth, Minn	3	5		
Elmira, N. Y			7	5
Englewood, N. J	2			
Fall River, Mass	4			
Findlay, Ohio	2	1		
Flint, Mich	1	7		
Grand Rapids, Mich	20	3		
Hackensack, N. J	4	5		
Harrison, N. J	1			
Haverhill, Mass	3	3		
Highland Park, Mich	8	3		
High Point, N. C			1	
Holyoke, Mass	3	2		
Independence, Mo			5	5
Ironton, Ohio	2	4		
Jamestown, N. Y			10	5
Jersey City, N. J			7	
Kalamazoo, Mich	4	1		
Kansas City, Kans	11			
Kansas City, Mo			31	35
Kearny, N. J	1	1		
Lackawanna, N. Y	3	1		
Leominster, Mass	3	1		
Lincoln, Nebr	1	3		
Little Rock, Ark	7	2		
Lockport, N. Y	2	2		
Los Angeles, Cal	19	7		
Louisville, Ky	9	46		
Lowell, Mass	3	4		
Lynn, Mass	3	2		
Manitowoc, Wis			1	1
Marion, Ohio	1			
Mason City, Iowa	2			
Melrose, Mass	1			
Methuen, Mass	1			
Montclair, N. J			4	
Morgantown, W. Va	1			
Morristown, N. J			1	1
Mount Vernon, N. Y	1			
Natick, Mass	3	1		
New Bedford, Mass	5	2		
New Britain, Conn			2	1
Newburyport, Mass	1	1		
New Orleans, La	1	6		
New York, N. Y		149	309	208
North Adams, Mass	2	1		
Northampton, Mass	1	1		
North Tonawanda, N. Y	2			
Norwood, Ohio	2	1		
Oakland, Cal	1	1	1	1
Oak Park, Ill	4			
Orange, N. J	4	1		
Palestine, Tex	1			
Passaic, N. J	1	1		
Paterson, N. J	29	2		
Philadelphia, Pa	113	63		
Phillipsburg, N. J	1	1		
Pomona, Calif	1	1		
Pontiac, Mich	1			
Port Chester, N. Y	2			
Reno, Nev	2	2		
Rochester, N. Y	17	9		
St. Paul, Minn	1	2		
Salem, Mass			4	1
Salem, Oreg	1			
San Antonio, Tex	9	7		
San Diego, Cal	1			
Sandusky, Ohio	1	1		
Sanford, Me	1	1		
San Francisco, Cal	10	7		
Schenectady, N. Y	4	3		
Somerville, Mass	2			
Springfield, Mass	12	2		
Toledo, Ohio	2	10		
Topeka, Kans	1	4		
Trenton, N. J	2	7		
Tuscaloosa, Ala	2			
Tyler, Tex	1			
Watertown, Mass	2			
Westfield, Mass	2			
West Hoboken, N. J	1			
West New York, N. J	2			
West Orange, N. J	2	1		
Wichita, Kans	1			
Winston-Salem, N. C	6	4		
Winthrop, Mass	1	1		
Worcester, Mass	4	5		
Yonkers, N. Y	3	3		
Youngstown, Ohio	3	3		

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POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for February, 1919.

Place.	New cases reported.	Place.	New cases reported.
Alabama:		South Dakota:	
Coffee County	1	Yankton County	1
Limestone County	1		
Total	2	Virginia:	
California:		Bedford County	1
San Mateo County—		Lee County	3
San Mateo	1	Louisa County	1
Indiana:		Total	5
Clay County	1		
Marion County	1		
Total	2		

City Reports for Week Ended Mar. 22, 1919.

During the week ended March 22, 1919, one case of poliomyelitis was reported at Springfield, Ill., and one death was reported at Buffalo, N. Y.

RABIES IN ANIMALS.

City Reports for Week Ended Mar. 22, 1919.

During the week ended March 22, 1919, rabies in animals was reported, one case each at Tuscaloosa, Ala., and Winston-Salem, N. C.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Camp Funston zone, Kans	8	Camp Sheridan zone, Ala	1
Camp Gordon zone, Ga	10	Camp Sherman zone, Ohio	1
Camp Jackson zone, S. C	1	Camp Zachary Taylor zone, Ky. and Ind	14
Camp Merritt zone, N. J	1	Tidewater health district, Va	1
Camp Pike zone, Ark	6	Camp Travis zone, Tex	1
Portsmouth and Norfolk County health district, Va	3	Wilmington sanitary district, N. C	2

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 758.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Camp Funston zone, Kans	1	Camp Polk zone, N. C	2
Gas and flame school zone, Ga. and Ala	13	Portsmouth and Norfolk County health district, Va	1
Camp Gordon zone, Ga	28	Camp Zachary Taylor zone, Ky. and Ind	1
Camp Lewis zone, Wash	1	Camp Travis zone, Tex	1
Muscle Shoals sanitary district, Ala	1		

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SMALLPOX—Continued.

California Report for February, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
California:						
Alameda County—						
Oakland	2		1		1	
Butte County	1		1			
Chico	26		1	5	14	6
El Dorado County	1				1	
Fresno County	1				1	
Humboldt County	2					2
Imperial County—						
El Centro	1				1	
Kern County	1			1		
Delano	1					1
Kings County—						
Corcoran	8					8
Los Angeles County	4				3	1
Long Beach	4			1	3	
Los Angeles	11			1	10	
Pomona	4				4	
Madera County	2				1	1
Monterey County	1			1		
Orange County	8				8	
Santa Ana	1				1	
Sacramento County—						
Sacramento	3		1	2		
San Bernardino County	1		1			
Ontario	1				1	
San Bernardino	1		1			
San Francisco	29			2	22	5
Santa Cruz County	1				1	
Watsonville	1				1	
Sutter County—						
Yuba City	1				1	
Tehama County—						
Red Bluff	2				2	
Tulare County	23		6		17	
Yuba County	5				5	
Marysville	11				11	
Ventura County	1					1
Oxnard	1				1	
Total	160		12	13	110	25

State Reports for February, 1919.

Place.	Cases.	Deaths.
Alabama:		
Autauga County	20	
Clarke County	1	
Colbert County	1	
Cullman County	2	
Dallas County	1	1
Etowah County	14	1
Geneva County	4	
Jackson County	5	
Jefferson County	3	
Lamar County	5	
Lauderdale County	13	
Lee County	11	
Limestone County	1	
Madison County	7	
Marengo County	11	
Monroe County	1	
Montgomery County	21	
Randolph County	1	
Walker County	1	
Washington County	2	
Winston County	1	
	4	
Total	141	2
Indiana:		
Allen County	7	
Cass County	7	
Clark County	4	
Dearborn County	6	
Decatur County	1	
Delaware County	31	
Elkhart County	15	
Fayette County	12	
Fountain County	17	
Fulton County	1	
Gibson County	1	
Howard County	1	
Huntington County	13	
Jennings County	6	

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SMALLPOX—Continued.

State Reports for February, 1919—Continued.

Place.	Cases.	Deaths.
Indiana—Continued.		
Kosciusko County	1	
Lake County	7	
Laporte County	12	
Lawrence County	1	
Madison County	19	
Marion County	9	
Montgomery County	1	
Parke County	16	
Porter County	5	
Pulaski County	1	
Ripley County	1	
Rush County	3	
Shelby County	1	
St. Joseph County	4	
Sullivan County	18	
Tippecanoe County	1	
Vigo County	2	
Washington County	3	
Wayne County	1	
Wells County	1	
Total	230	
South Dakota:		
Beadle County	21	
Bon Homme County	1	
Brule County	2	
Davison County	6	
Deuel County	2	
Fall River County	3	
Hand County	1	
Minnehaha County	8	
Total	44	

Place.	Cases.	Deaths.
Virginia:		
Accomac County	2	
Alleghany County	17	
Clifton Forge	1	
Lowmoor	1	
Bedford County—		
Moneta	4	
Botetourt County	1	
Buchanan	4	
Buchanan County	1	
Dinwiddie County	1	
Elizabeth City County	2	
Hampton	1	
Franklin County	1	
Frederick County	2	
Grayson County	10	
Halifax County	1	
Houston	1	
King William County	5	
Lunenburg County	1	
Nelson County	2	
Pittsylvania County	2	
Prince George County	1	
Princess Anne County	1	
Prince Edward County	2	
Roanoke County	1	
Russell County	10	
Surry County	13	
Tazewell County	8	
Pocahontas	1	
Wise County	7	
Total	113	

City Reports for Week Ended Mar. 22, 1919.

Place.	Cases.	Deaths.
Abilene, Tex	1	
Akron, Ohio	5	
Atlanta, Ga	56	1
Austin, Tex	1	
Baltimore, Md	1	
Beatrice, Nebr	2	
Beaumont, Tex	1	
Bedford, Ind	2	
Billings, Mont	1	
Boston, Mass	1	
Burlington, Iowa	1	
Cedar Rapids, Iowa	8	
Chanute, Kans	17	
Charleston, W. Va	2	
Chicago, Ill	6	
Cincinnati, Ohio	3	
Cleveland, Ohio	6	
Columbus, Ohio	2	
Corpus Christi, Tex	2	
Council Bluffs, Iowa	3	
Covington, Ky	3	
Dallas, Tex	6	
Davenport, Iowa	5	
Denver, Colo	14	
Des Moines, Iowa	3	
Dubuque, Iowa	1	
Duluth, Minn	3	
Durham, N. C	1	
El Paso, Tex	1	
Evansville, Ind	1	
Fargo, N. Dak	1	
Fort Wayne, Ind	13	
Fort Worth, Tex	9	
Fresno, Cal	1	

Place.	Cases.	Deaths.
Galesburg, Ill		1
Galveston, Tex	1	1
Grand Rapids, Mich	2	
Green Bay, Wis	1	
Hoquiam, Wash	1	
Houston, Tex	2	
Independence, Mo	8	
Indianapolis, Ind	1	
Kalamazoo, Mich	7	
Kansas City, Kans	1	
Kansas City, Mo	23	
Laurel, Miss	1	
Lincoln, Nebr	14	
Little Rock, Ark	2	
Logansport, Ind	2	
Los Angeles, Cal	8	
Ludington, Mich	1	
Macon, Ga	1	
Madison, Wis	3	
Marinette, Wis	3	
Memphis, Tenn	3	
Middletown, Ohio	2	
Milwaukee, Wis	9	
Minneapolis, Minn	9	
Mobile, Ala	2	
Moline, Ill	1	
Muskogee, Okla	8	
Nashville, Tenn	7	
New London, Conn	1	
New Orleans, La	2	
New York, N. Y	1	
Norfolk, Va	5	
Ogden, Utah	7	
Oklahoma City, Okla	8	

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SMALLPOX—Continued.

City Reports for Week Ended Mar. 22, 1919—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Omaha, Nebr.	38		San Francisco, Cal.	7	
Palestine, Tex.	3		Seattle, Wash.	18	
Peoria, Ill.	8		Sioux City, Iowa.	4	
Pittsburgh, Pa.	1		Steubenville, Ohio.	2	
Portland, Oreg.	22		Superior, Wis.	8	
Portsmouth, Va.	1		Tacoma, Wash.	16	
Pueblo, Colo.	2		Terre Haute, Ind.	2	
Roanoke, Va.	3		Toledo, Ohio.	6	
Rochester, N. Y.	1		Topeka, Kans.	1	
Rock Island, Ill.	1		Walla Walla, Wash.	1	
Saginaw, Mich.	1		Washington, D. C.	3	
St. Joseph, Mo.	5		Wichita, Kans.	13	
St. Louis, Mo.	16		Winston-Salem, N. C.	16	
St. Paul, Minn.	11		Yakima, Wash.	17	
Salt Lake City, Utah	14		Youngstown, Ohio.	5	
San Antonio, Tex.	3				

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Gas and flame school zone, Ga. and Ala.	1	Camp Pike zone, Ark.	1
Camp Gordon zone, Ga.	20	Camp Sheridan zone, Ala.	18
Camp Jackson zone, S. C.	24	Camp Zachary Taylor zone, Ky. and Ind.	2
Muscle Shoals sanitary district, Ala.	11	Tidewater health district, Va.	1
Picric acid plant zone, Ga.	3	Camp Travis zone, Tex.	6

TETANUS.

St. Louis, Mo., Report for Week Ended Mar. 22, 1919.

One case of tetanus was reported at St. Louis, Mo., during the week ended March 22, 1919.

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Gas and flame school zone, Ga. and Ala.	1	Portsmouth and Norfolk County health district, Va.	2
Camp Gordon zone, Ga.	1	Camp Zachary Taylor zone, Ky. and Ind.	18
Camp Jackson zone, S. C.	1	Tidewater health district, Va.	2
Muscle Shoals sanitary district, Ala.	2	Camp Travis zone, Tex.	2
Camp Pike zone, Ark.	3	Wilmington sanitary district, N. C.	1
Camp Polk zone, N. C.	4		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 758.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 5, 1919.

	Cases.		Cases.
Gulfport health district, Miss.	1	Camp Pike zone, Ark.	2
Camp Jackson zone, S. C.	1	Camp Travis zone, Tex.	2
Muscle Shoals sanitary district, Ala.	1	Wilmington sanitary district, N. C.	1

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TYPHOID FEVER—Continued.

State Reports for February, 1919.

Place.	New cases reported.
Alabama:	
Bibb County	3
Butler County	1
Coffee County	2
Hale County	1
Jefferson County	4
Marshall County	1
Montgomery County	1
Tuscaloosa County	1
Walker County	2
Washington County	1
Total	17
California:	
Alameda County—	
Berkeley	2
Oakland	1
Contra Costa County—	
Richmond	1
Los Angeles County—	
Los Angeles	9
Mendocino County—	
Willits	4
Riverside County	20
Riverside City	4
Sacramento County	2
San Francisco	4
San Joaquin County	1
Tracy	3
Santa Barbara County—	
Lompoc	1
Total	52
Indiana:	
Allen County	3
Clark County	4
Delaware County	1
Gibson County	2
Jennings County	1
Johnson County	2
Lake County	2
Laporte County	1
Parke County	1
Indiana—Continued.	
Hamilton County	2
Hancock County	1
Total	20
Virginia:	
Alleghany County—	
Clifton Forge	2
Lowmoor	10
Augusta County	1
Bedford County	7
Buchanan County	1
Buckingham County	1
Caroline County	1
Chesterfield County—	
Beach	1
Clarke County	1
Culpeper County	1
Dinwiddie County—	
Petersburg	1
Henrico County—	
Richmond	3
James City County	1
King William County—	
West Point	3
Lee County—	
Keokee	3
Louisa County	3
Nelson County	3
Page County—	
Shenandoah	3
Roanoke County—	
Vinton	1
Rockingham County	1
Shenandoah County	2
Southampton County	2
Surry County	1
Tazewell County—	
Pocahontas	1
Wise County—	
Pardee	1
Total	55

City Reports for Week Ended Mar. 22, 1919.

Place.	Cases.	Deaths.
Akron, Ohio	1	
Allentown, Pa	1	
Atlanta, Ga	2	
Baltimore, Md		1
Birmingham, Ala	2	
Butler, Pa	1	
Cambridge, Mass	1	
Charlotte, N. C	1	
Chicago, Ill	1	
Cleveland, Ohio	2	1
Dallas, Tex		1
Dayton, Ohio	4	
Detroit, Mich	2	
East Liverpool, Ohio		2
East Orange, N. J	1	
Flint, Mich	1	
Fort Worth, Tex	1	1
Galveston, Tex	1	
Grand Rapids, Mich	2	
Hartford, Conn	1	1
Houston, Tex	1	1
Independence, Mo	1	
Johnstown, Pa	1	
Kansas City, Mo	1	
Los Angeles, Cal	2	
Memphis, Tenn	188	11
Milwaukee, Wis	1	
Mobile, Ala		1
Nashville, Tenn	1	
New Bedford, Mass	1	
New London, Conn	1	1
New York, N. Y	4	
Northampton, Mass	1	
Oakland, Cal	2	
Ogden, Utah	1	
Omaha, Nebr		1
Paterson, N. J	1	
Philadelphia, Pa	4	
Quincy, Ill		1
St. Louis, Mo		1
San Antonio, Tex	2	1
San Francisco, Cal	1	
Springfield, Ill		1
Syracuse, N. Y	2	
Toledo, Ohio		1
Tuscaloosa, Ala	1	
White Plains, N. Y	1	
Wilmington, N. C	2	

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[illegible], Pa.	25,783	6			1	13		2		2		
Anderson, Ind.	59,712		4						1			
Ann Arbor, Mich.	24,230	6			1	1		3				
Anniston, Ala.	15,041	7										
Ansonia, Conn.	14,326											
Appleton, Wis.	16,954	7										
Arlington, Mass.	18,005	11				2				3		
Asbury Park, N. J.	13,073	5										
Ashtabula, Ohio.	14,620	1	2			1						
Atlanta, Ga.	22,608	8						3				
Atlantic City, N. J.	196,144	57	2			23		8		5		
Attleboro, Mass.	59,515	20				1		2		9	1	
Auburn, N. Y.	19,776	4								2		
Austin, Tex.	37,823	9						2				
Baltimore, Md.	35,612	8	1					2				
Bangor, Me.	594,637	219	30	1	13			204		44	2	
Baton Rouge, La.	26,958	1						2				
Battle Creek, Mich.	17,544				1							
Bayonne, N. J.	30,159		4		10			2				
Beacon, N. Y.	72,204		4					1		5		
Beatrice, Nebr.	11,674	10										
Beaumont, Tex.	10,437	9									1	
Beaver Falls, Pa.	28,851	9			1							
Bedford, Ind.	13,749		1								1	
Bellaire, Ohio.	10,613	2										
Belleville, N. J.	14,575	14						1				
Beloit, Wis.	12,797											
Berkeley, Cal.	18,547	11						2		1		
Berlin, N. H.	60,427	15						1		1		
Beverly, Mass.	13,892	6								1	1	
Biddeford, Me.	22,128	3									1	
Billings, Mont.	17,760	8										
Birmingham, Ala.	15,123		2		1			4		1	1	
Bloomfield, N. J.	189,716	52	4		12					10	4	
Bluefield, W. Va.	19,013	1			2			4				
Boise, Idaho.	16,123							1				
Boston, Mass.	35,951	4						63	1	71	23	
Braddock, Pa.	767,813	228	49	5	12							
Brazil, Ind.	22,060		2									
Bridgeport, Conn.	10,472	4										
Bristol, Conn.	124,724	44	4		6			2		10	1	
Brockton, Mass.	16,318	2			1			1			2	
Brookline, Mass.	69,152	14	3					7		6		
Brunswick, Ga.	33,526	9			3			1		1		
Buffalo, N. Y.	10,984	7			8					1		
Burlington, Iowa.	475,781	163	38	6	46			24	1	25	4	
Burlington, Vt.	25,144	8						3			13	
Butler, Pa.	21,802	4			20							
Butte, Mont.	28,677							1			1	
Cadillac, Mich.	44,057							7				
Cairo, Ill.	10,158	4	2									
	15,995	7	1		3							

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Population Apr. 15, 1910.

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Pottsville, Pa	22,717		3		4				
Poughkeepsie, N. Y	30,786	12	2				3		
Providence, R. I	259,895	79	8		2		16		
Pueblo, Colo	56,084		2		1		2		
Quincy, Ill	36,832	10	1				7		
Quincy, Mass	39,022	9			1				
Racine, Wis	47,465	6							1
Rahway, N. J	10,361	3							
Raleigh, N. C	20,274	12			1				1
Reading, Pa	111,607		3		144		2		4
Redlands, Cal	14,573	4							3
Reno, Nev	15,514	9							
Richmond, Va	158,702	58			20		1		5
Riverside, Cal	20,496	10			1		1		1
Roanoke, Va	46,282	13	2		16				1
Rochester, N. Y	264,714	93	10	2	3		12	1	13
Rock Island, Ill	29,452	9			1				
Rocky Mount, N. C	12,673		1						2
Rome, N. Y	24,259		1		1		2		4
Rutland, Vt	15,038	10							
Sacramento, Cal	68,984	26	1				2		2
Saginaw, Mich	56,469	18					1		
St. Joseph, Mo	86,498	30	6		1		3		
St. Louis, Mo	768,630	309	36	6	10		18	1	36
St. Paul, Minn	252,465	83	23	3	14	1	12	1	7
Salem, Mass	49,346	19	7				8		1
Salem, Oreg	21,274	12							2
Salt Lake City, Utah	121,623	25	4		5		2		
San Angelo, Tex	[1] 10,321	4							
San Antonio, Tex	128,215	17	11				3		10
San Diego, Cal	56,412	27					1		8
Sandusky, Ohio	20,226	11							
Sanford, Me	11,217	2							
San Francisco, Cal	471,023	148	12	4	3		4		26
San Jose, Cal	39,810						1		1
Santa Barbara, Cal	15,360	7							1
Santa Cruz, Cal	15,150	3							1
Saratoga Springs, N. Y	13,839	5							3
Saugus, Mass	10,210	2	3		1				1
Sault Ste. Marie, Mich	14,130	3							
Schenectady, N. Y	103,774	29	2						3
Seattle, Wash	366,445		4		34		14		
Shamokin, Pa	21,274		10						
Sharon, Pa	19,156				1				
Somerville, Mass	88,618	21	9	1	1		4		5
South Bend, Ind	70,967	23	1		75		2		
Southbridge, Mass	14,465	4							
Spartanburg, S. C	21,985	4			1				1
Spokane, Wash	157,656		1				5		
Springfield, Ill	62,623	20					1		2
Springfield, Mass	108,668	42	1				2		4
Springfield, Ohio	52,296	18			26				
Steelton, Pa	15,759				6				3
Steubenville, Ohio	28,259	22	1						1
Streator, Ill	14,313	12			1				
Superior, Wis	47,167	12	2						

[1] Population Apr. 15, 1910.

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	1,204	218	2,075	527	714,973
	1,129	217	1,960	496	723,437
	1,895	794	2,901	1,367	1,636,097
	1,348	293	2,274	623	1,270,808
	453	124	637	202	245,933
	375	124	781	308	327,192
	765	260	1,104	384	384,363
	774	214	1,077	363	431,757
	959	242	1,474	361	358,663
	1,043	213	1,285	291	200,954
	731	187	1,392	399	430,489
	10,676	2,886	16,960	5,321	6,724,663

SWITZERLAND.

Influenza—1918–1919.

r 1918 there were reported 664,433 cases of influenza (See p. 723.) At Basel 1,558 cases were reported of January and 929 during the period February 1 to Gall 390 cases were reported in January and 40 rst two weeks in February, 1919.

SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Received During Week Ended Apr. 11, 1919.[2]

CHOLERA.

	Date.	Cases.	Deaths.	Remarks.
	Jan. 25–Feb. 1	3,183	2,866	
	Jan. 25–Feb. 8	.....	219	
	Feb. 9–15	26	15	
	Feb. 2–8	1	1	
	Jan. 27–Feb. 2	32	13	

Mar. 21, 1919, p. 589.
the Public Health Service, American consuls, and other sources.

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	do	12	10	
	do	32	20	
	do	6	3	
	do	10	4	
	do	8	4	
	do	36	32	
	do	12	12	
	do	6	6	
				Feb. 9–15, 1919: Cases, 109; deaths, 67.
	9–15	17	13	
	do	3	2	
	do	5	6	
	do	43	25	
	do	9	3	No cases in city of Laguna.
	do	19	8	
Oriental Negros	do	3	2	
Pangasinan	do	7	5	
Tayabas	do	3	3	

PLAGUE.

Ceylon:				
Colombo	Feb. 9–15	1	1	
Ecuador:				
Duran	Feb. 16–28	1	1	
Guayaquil	do	7	1	
Egypt				Jan. 31–Mar. 6, 1919: Cases, 69; deaths, 57.
Suez	Jan. 31–Mar. 1	1	1	
India				Jan. 25–Feb. 1, 1919: Cases, 2,705; deaths, 1,809.
Bombay	Jan. 25–Feb. 1	4	4	
Calcutta	Feb. 2–8	2		
Madras	Feb. 9–15	1	1	
Madras Presidency	do	354	244	
Rangoon	Jan. 25–Feb. 8	29	28	
Indo-China:				
Cochin-China—				
Saigon	Jan. 27–Feb. 2	2	1	
Java:				
East Java				Jan. 8–14, 1919: Cases, 37; deaths, 37.
Surabaya district	Jan. 8–14	14	14	

SMALLPOX.

Canada:				
Ontario—				
Ottawa	Mar. 16–22	2		
China:				
Canton	Feb. 9–15			Present.
Chungking	Jan. 25–Feb. 8			Do.
Nanking	Feb. 16–22			Do.
Egypt:				
Alexandria	Feb. 12–25	5	1	
India:				
Bombay	Jan. 25–Feb. 1	31	7	
Calcutta	Jan. 25–Feb. 8		53	
Madras	Feb. 9–18	24	17	
Rangoon	Jan. 25–Feb. 8	160	54	
Indo-China:				
Cochin-China—				
Saigon	Jan. 27–Feb. 2	5		

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o	2	1	
1-31			Present.
			Do.
25			Do.
do	5	1	Mining district.
do			Present.
do			
do			

YELLOW FEVER.

	1		
Feb. 16–28	10	5	
do	1		
do	1	1	
do			

eceived from Dec. 28, 1918, to Apr. 4, 1919.

CHOLERA.

	Date.	Cases.	Deaths.	Remarks.
		4	5	
	Nov. 17–30	17	11	On a barge.
	To Oct. 5	1		1 case in October, 1918, on a barge in canal.
	Oct. 13–19			
			1,031	
	Aug. 18–Dec. 28	1,351	3,363	
	Dec. 29–Jan. 25	3,788	241	Report for Nov. 23, 1918, missing.
	Sept. 20–Dec. 21		501	
	Dec. 29–Jan. 25	2	2	
	Jan. 26–Feb. 8	264	164	Oct. 27–Nov. 2, 1918: Cases, 9; deaths, 4.
	Oct. 5–Dec. 28	374	267	
	Jan. 5–Feb. 1	35	33	
	Oct. 5–Dec. 21	13	10	July 1–Aug. 31, 1918: Cases, 670; deaths, 412.
	Dec. 29–Jan. 18		30	
	July 1–Aug. 31	37	169	
	do	322	279	
	do	357	45	
	Oct. 7–Dec. 22	75	82	
	Dec. 3–Jan. 26	148	34	
	July 1–31	50		
a	July 1–Aug. 31	4		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918 to Apr. 4, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Java:				
East Java				Oct. 7-Dec. 31, 1918: Cases, [illegible]; deaths, 323. Jan. 1-7, 1919: Cases, 7; deaths, 6.
Surabaya district	Oct. 7-Dec. 31	656	423	
Do	Jan. 1-7	4	4	
Mid-Java				Sept. 28-Dec. 18, 1918: Cases, 3,282; deaths, 2,914.
Samarang	Sept. 26-Oct. 16	120	111	
West Java				Oct. 3-Dec. 11, 1918: Cases, 672; deaths, 238. Dec. 27, 1918-Jan. 23, 1919: Cases, 10; deaths, 1.
Batavia	Oct. 3-Dec. 11	291	148	
Do	Dec. 27-Jan. 23	8	2	
Cheribon	Jan. 3-9	1		
Mesopotamia:				
Bagdad	Oct 11-18	8		
Philippine Islands:				
Manila	Sept. 22-Dec. 28	181	121	
Do	Dec. 29-Feb. 1	16	7	
Provinces				Nov. 2-8, 1918: Cases, 711; deaths, 417. Nov. 17-Dec. 28, 1918: Cases, 1,201; deaths, 698. Dec. 29, 1918-Feb. 1, 1919: Cases, 530; deaths, 305.
Albay	Dec. 15-21	1	1	
Bataan	Nov. 17-Dec. 28	38	32	
Do	Jan. 5-11	2	2	
Batangas	Nov. 2-9	156	141	
Do	Nov. 17-Dec. 28	79	65	
Do	Dec. 29-Feb. 1	20	15	
Bohol	Nov. 2-9	19	17	
Do	Nov. 17-Dec. 21	12	8	
Do	Jan. 12-Feb. 1	22	15	
Bulacan	Oct. 27-Nov. 2	5	6	
Do	Nov. 17-Dec. 28	44	30	
Do	Dec. 29-Feb. 1	28	17	
Capiz	Dec. 22-28	7	5	
Do	Jan. 5-25	28	14	
Cavite	Oct. 27-Nov. 2	38	28	
Do	Nov. 17-Dec. 21	161	75	
Do	Dec. 29-Jan. 25	17	16	
Cebu	Dec. 15-21	41	20	
Do	Jan. 12-18	13	12	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 1	37	22	
Iloilo	Oct. 27-Nov. 2	9	6	
Do	Nov. 17-Dec. 21	70	51	
Do	Jan. 5-Feb. 1	49	35	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Feb. 1	46	38	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 24-30	4	5	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-18	23	17	
Nueva Ecija	Jan. 12-25	9	6	
Oriental Negros	Nov. 2-9	20	8	
Do	Nov. 17-Dec. 7	6	6	
Do	Jan. 5-Feb. 1	22	16	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Feb. 1	15	12	
Pangasinan	Nov. 2-9	236	192	
Do	Nov. 17-Dec. 28	428	313	
Do	Dec. 29-Feb. 1	112	91	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	10	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 12-25	8	4	
Tayabas	Nov. 2-9	7	4	
Do	Nov. 17-Dec. 28	54	25	
Do	Dec. 29-Feb. 1	54	47	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-18	19	15	
Poland:				
Warsaw	Sept. 29-Oct. 5	2		
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 1-Aug. 31, 1918: Cases, 406; deaths, 733.
Ukrania—				
Ekaterinaslav	Sept. 1-20	7	6	
Odessa	....do	25		Sept. 1-20, 1918, 11 cases on S. S. Helena.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918 to Apr. 4, 1919—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
China:				
Amoy	Nov. 24-Dec. 8			Present.
Chungking	Dec. 1-7			Do.
Hongkong	Oct. 1-Dec. 28	4	4	
Do	Jan. 1-31	5	4	
Ecuador:				
Guayaquil	July 1-Dec. 31	20	7	
Do	Jan. 1-Feb. 15	36	12	
Taura	Dec. 16-31	1	1	
Egypt				Jan. 1-Nov. 21, 1918: Cases, 357; deaths, 153. Jan. 1-Feb. 27, 1919: Cases, 65; deaths, 53.
Provinces—				
Assiout	Feb. 24-27	5	2	1 septicemic.
Girgeh	Feb. 22-24	4	2	2 pneumonic.
Minieh	Feb. 21-27	2	2	1 pneumonic.
Suez	Jan. 31-Feb. 23	2	1	
India				Sept. 23-Dec. 28, 1918: Cases, 24,279; deaths, 15,369. Dec. 29, 1918-Jan. 25, 1919: Cases, 7,840; deaths, 5,720.
Bombay	Aug. 18-Dec. 28	41	29	
Do	Jan. 12-18	1	1	
Calcutta	Dec. 22-28		1	
Do	Jan. 12-18		1	
Karachi	Oct. 19-Dec. 28	17	17	
Do	Dec. 29-Jan. 25	5	5	
Madras	Dec. 8-28	26	17	
Do	Dec. 29-Feb. 1	128	57	
Madras Presidency	Oct. 13-Dec. 28	1,152	774	Oct. 27-Nov. 2, 1918: Cases, 142; deaths, 38.
Do	Dec. 29-Feb. 1	1,622	1,060	
Rangoon	Oct. 5-Dec. 21	84	81	
Do	Dec. 29-Jan. 25	35	33	
Indo-China				July 1-Aug. 31, 1918: Cases, 125 deaths, 115.
Anam	July 1-Aug. 31	37	32	
Cambodia	do		49	
Cochin-China	do	57	33	
Saigon	Oct. 7-Nov. 24	5	1	
Do	Jan. 13-19	1	1	
Kwang-Chow-Wan	July 1-31	1	1	
Java:				
East Java				Oct. 7-Nov. 18, 1918: Cases, 109; deaths, 109. Jan. 1-7, 1919: Cases, 32; deaths, 32.
Surabaya (district)	Oct. 7-Dec. 31	92	92	
Do	Jan. 1-7	20	20	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 14; deaths, 14.
Samarang	Sept. 25-Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16-29	5	2	
Siam:				
Bangkok	Sept. 21-28	4	3	
Do	Oct. 5-12	2	2	
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez qurantine station from Bombay.

SMALLPOX.

Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
Brazil:				
Rio de Janeiro	Dec. 1-28	46	19	Oct. 6-12, 1918: Cases, 15; deaths, 10.
Do	Dec. 30-Jan. 25	25	11	
British East Africa:				
Mombasa	Sept. 1-Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-18	2		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 22	6		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918 to Apr. 4, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks
Canada—Continued.				
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 19			Do.
Digby	....do			Do.
Halifax	Dec. 7-28	10		
Do	Jan. 5-Mar. 15	161		
Middleton	Dec. 29-Jan. 4			Do.
Sydney	Jan. 5-Mar. 8	4		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-Mar. 15	10		
Toronto	Feb. 2-15	2		
Prince Edward Island:				
Charlotte Town	Feb. 27-Mar. 5	1		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-Mar. 8	30		
Paspebiac	....do	8		
Quebec	Dec. 15-21	1		
Do	Dec. 29-Mar. 15	14		
Ceylon:				
Colombo	Jan. 12-18	1		
China:				
Amoy	Oct. 13-Dec. 28			Do.
Do	Jan. 5-Feb. 17			Do.
Antung	Feb. 10-16	1		
Canton	Nov. 17-23			Do.
Chungking	Nov. 10-Dec. 28			Do.
Do	Jan. 5-18			Do.
Foochow	Nov. 24-Dec. 23			Do.
Do	Dec. 29-Feb. 8			Do.
Hongkong	Dec. 15-21	1	1	
Do	Feb. 2-8	1		
Nanking	Dec. 1-28			Do.
Do	Dec. 29-Feb. 8			Do.
Shanghai	Jan. 20-25	1		
Chosen (Korea):				
Chemulpo	Nov. 1-Dec. 31	15	4	
Do	Jan. 1-31	6	1	
Denmark:				
Copenhagen	Nov. 9-Dec. 28	12		
Do	Dec. 29-Jan. 19	15		
Egypt:				
Alexandria	Dec. 17-23	1	1	
Do	Jan. 22-28	1		
France:				
Bordeaux	Feb. 8-13		1	
Great Britain:				
Liverpool	Jan. 26-Mar. 1	5		Of these, 2 from vessels.
Greece:				
Saloniki	Feb. 2-15		3	
India:				
Bombay	Aug. 18-Dec. 28	35	8	
Do	Dec. 29-Jan. 25	49	17	
Calcutta	Sept. 29-Dec. 28		17	Report for week ended Nov. 23, 1918, missing.
Do	Dec. 29-Jan. 25		27	
Karachi	Sept. 29-Dec. 28	13	4	
Do	Dec. 29-Feb. 8	34	8	
Madras	Oct. 5-Dec. 28	62	40	
Do	Dec. 29-Feb. 1	65	23	
Rangoon	Oct. 20-Dec. 21	32	6	
Do	Dec. 29-Jan. 18	68	18	
Indo-China:				
Anam	July 1-Aug. 31	87	51	
Cambodia	Aug. 1-31	78	40	July 1-31, 1918: Cases, 322; deaths, 104.
Cochin-China	July 1-Aug. 31	335	87	
Saigon	Oct. 7-Dec. 22	20	5	
Do	Dec. 30-Jan. 26	3	3	
Tonkin	July 1-Aug. 31	11	1	
Italy:				
Genoa	Jan. 9-31	2	1	
Palermo	Jan. 31-Feb. 20	2		
Japan:				
Kobe	Oct. 26-Dec. 28	186	46	
Do	Dec. 29-Feb. 15	231	54	
Taihoku	Jan. 15-Feb. 11	145	18	Island of Formosa.
Yokohama	Jan. 20-26	1		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 4, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Java:				
East Java				Oct. 7–Dec. 31, 1918: Cases, 22; deaths, 1. Jan. 1–7, 1919: Cases, 1.
Surabaya (district)	Oct. 7–Dec. 31	16		
Do	Jan. 1–7	1		
Mid-Java				Sept. 25–Dec. 18, 1918: Cases, 172; deaths, 3.
West Java				Oct. 2–Dec. 11, 1918: Cases, 809; deaths, 263. Dec. 27, 1918–Jan. 23, 1919: Cases, 158; deaths, 41.
Batavia	Oct. 2–Dec. 11	185	151	
Do	Dec. 27–Jan. 23	34	23	
Manchuria:				
Dairen	Jan. 15–21	1		
Mesopotamia:				
Bagdad	Oct. 11–Dec. 27	308	?7	
Do	Dec. 28–Jan. 10	3		
Mexico:				
Ciudad Juarez	Nov. 24–30	1		
Mexico City	Sept. 22–Dec. 28	23		
Do	Dec. 29–Mar. 8	10		
Vera Cruz	Feb. 10–16	2		
Newfoundland:				
St. Johns	Dec. 6–20	4		
Do	Dec. 28–Mar. 14	21		
Outports—				
Avondale	do	4		
Blaine Harbor	Dec. 14–20	2		
Bay of Islands	Jan. 11–17	6		
Do	Feb. 15–21	10		
Bay Roberts	Dec. 21–27	1		
Bonavista	Jan. 26–31	1		
Brigus Junction	Mar. 1–7	1		
Bryants Cove	Dec. 7–13	3		
Burin	do	4		
Coleys Point	Dec. 14–20	1		
Curling	Jan. 26–31	3		
Frenchmans Cove	Feb. 1–7	1		
Humbermouth	Mar. 15–21			Present.
Kings Cove	Jan. 18–Mar. 14	2		
Little Paradise	Feb. 9–14	1		
McIvers	Feb. 1–7	15		
Merasheen	do			Present.
Mercers Cove	Feb. 9–14	1		
Middle Arm	Feb. 1–7	40		Bay of Islands.
Morton's Harbor	Mar. 8–14	1		
Musgrave Harbor	Dec. 7–13	4		
Do	Jan. 11–17	6		Feb. 7, 1919: Present.
Paradise	Dec. 7–13	60		Placentia Bay.
Petitforte	Feb. 15–21	1		
Saddle Hill	do	1		Harbor Grace.
Springdale	Feb. 15–Mar. 7	7		
St. Georges	Feb. 1–Mar. 14	26		
St. Jacques	Jan. 18–24	2		
Panama				Aug. 1–31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1–25, 1919: Cases, 28.
Colon	Dec. 15–21	1		
Do	Dec. 29–Feb. 9	8		
Philippine Islands:				
Manila	Nov. 2–9	4	3	
Do	Dec. 29–Feb. 1	6	2	Varioloid, 9.
Portugal:				
Lisbon	Nov. 16–Dec. 28	843		
Portuguese East Africa:				
Lourenco Marques				July 1–Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1–3	4		
Do	Jan. 17–23		1	
Spain:				
Barcelona	Jan. 9–Feb. 11		5	
Bilbao	Jan. 1–31	1		
Cadiz	Oct. 1–Dec. 31	18		
Madrid	Sept. 1–Oct. 31	153		
Do	Jan. 1–31		56	
Seville	Nov. 1–Dec. 31		8	
Do	Jan. 1–31		3	
Valencia	Nov. 10–Dec. 21	40	9	
Do	Dec. 29–Jan. 25	93	10	
Straits Settlements:				
Penang	Oct. 6–12	1		
Union of South Africa:				
Cape Town	Aug. 1–30	1		
Johannesburg	Aug. 1–Oct. 31	12		Nov. 1–30, 1918: Cases, 4.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 4, 1919—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers	Nov. 1-30	1		
Austria-Hungary:				
Hungary	Sept. 2-8	2		
Brazil:				
Ceara	Sept. 14-21	1		
Rio de Janeiro	Dec. 15-22	2		
Do	Dec. 29-Jan. 25	3		
São Paulo	Jan. 13-19	3		
Bulgaria:				
Aeteven	Mar. 10			Present.
Rustchuk	do			Do.
China:				
Antung	Dec. 2-15	2		
Do	Jan. 6-12		1	
Chosen (Korea):				
Seoul	Jan. 1-31	2		
Colombia:				
Barranquilla	Nov. 8-Dec. 28		3	
Do	Jan. 5-26	2	2	
Egypt:				
Alexandria	Oct. 14-Dec. 31	86	36	
Do	Jan. 1-Feb. 11	45	29	
Germany:				
Breslau	Sept. 29-Oct. 19	12	8	
Königsberg	do	3	1	
Mostelten	do	7	2	District of Allenstein.
Great Britain:				
Glasgow	Dec. 22-28	5		
Do	Jan. 5-Feb. 8	9	1	
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-Feb. 15		78	
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-Feb. 23	19	4	
Java:				
East Java				Oct. 7-21, 1918: Cases 1.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 18, 1918: Cases, 6
West Java				Oct. 2-23: Cases, 31; deaths 6
Batavia	Oct. 2-23	15	4	
Macedonia:				
Drama	Mar. 17			Present.
Kavala	do	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5-Dec. 27	2		
Do	Dec. 28-Jan. 10	3		
Mexico:				
Aguascalientes	Feb. 2-23		3	
Guadalajara	Nov. 1-30	2		
Mexico City	Sept. 22-Dec. 28	494		
Do	Dec. 29-Mar. 8	209		
Netherlands:				
Amsterdam	Dec. 8-14	1		
Do	Jan. 12-18	4		
Rotterdam	Feb. 2-15	194	24	Jan. 26-Feb. 27, 1919: Cases 462, deaths, 66.
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 30	43		
Do	Jan. 17-30	6	1	
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in mines, interior towns.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 4, 1919—Continued.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Pernambuco	Oct. 1-Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29-Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1-30	1		
Catarama	Feb. 1-15	1		
Chobo	Jan. 1-15	1		
Daule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-Feb. 15	3	1	
Guayaquil	July 1-Dec. 31	323	177	
Do	Jan. 1-Feb. 15	104	54	
Milagro	Nov. 1-15	1		
Do	Feb. 1-15	1		
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Payo (Hacienda)	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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PUBLIC HEALTH REPORTS

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INFLUENZA IN SOUTH AFRICA.

Over 40 per cent of its population affected with influenza in the four months during which the epidemic raged is the record reported by the Union of South Africa in an official Blue Book just received by the United States Public Health Service.

For the 6,115,212 population this means 2,616,805 cases of influenza, and of these, 139,471 were fatal—a case mortality rate of 5.32 per cent. This is certainly a severe visitation. The case mortality rate among the European stocks was less than half that among the non-Europeans, the respective rates being 2.57 and 5.90 per cent.

In South Africa persons in the third and fourth decades of life were particularly susceptible to attack by the disease, and the death rate was also greater in these age groups. A large number of instances were also noted where the disease resulted in miscarriages. Moreover, there was a high mortality among pregnant women.

The highest death rate from the disease was in the Cape Province, where out of every thousand of population there were 33.5 deaths from influenza and its complications. The rates for Orange Free State, Transvaal, and Natal were very much lower, being 18.21, 16.24, and 11.47, respectively.

HEALTH INSURANCE, THE MEDICAL PROFESSION, AND THE PUBLIC HEALTH.

INCLUDING THE RESULTS OF A STUDY OF SICKNESS EXPECTANCY.[1]

By B. S. WARREN, Assistant Surgeon General, and EDGAR SYDENSTRICKER, Public Health Statistician, United States Public Health Service.

The interest manifested by the medical profession and by health officials in the proposals for governmental health insurance in this country is as commendable as it is necessary. Any measure that may effect the quality and extent of medical service or that possesses possibilities in the prevention of disease is, it will be generally conceded, a proper subject of personal and professional concern to the physician, and a matter of vital consequence to public health administration. Health insurance—at least in some of the forms in which it has been suggested—without doubt is such a measure. In fundamental ways it proposes to modify some of the existing conditions of the practice of medicine. In a quite definite manner it promises

[1] Read at the annual meeting of the Medical and Chirurgical Faculty of Maryland at Baltimore, Apr. 25, 1917.

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insurance, means. Sickness insurance is a method by which the economic loss caused by sickness is distributed among a group of persons. The distribution is effected by the payment of periodic premiums on the part of members of the group. In this way the cost of sickness arising from the stoppage of income, from fees of doctors, nurses, and hospitals, from expenditures for medicines, and the like, does not come as a sudden financial burden to the insured individual. This kind of insurance is now provided in the United States by many commercial companies and by thousands of fraternal orders and benefit associations of a wide variety of types, and is taken advantage of by a large proportion of those who are thrifty enough and financially able to pay the premiums. In the principal European countries sickness insurance of wage earners has been made a governmental function, but with certain fundamental differences from that form of sickness insurance which exists in this country. Among these differences are its extension to all wage earners upon a compulsory basis, the addition of medical and hospital service and certain other benefits to the cash payments to the sick, and the distribution of the cost of insurance not only among the insured, but also among the two other groups—employers and the public—who are considered responsible, in some degree, for the conditions which affect the health of the insured.

HEALTH INSURANCE.

The proposals for governmental "health insurance" in the United States not only adopt the principles just mentioned, but include additional features. Among these are an adequate medical service for the

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insured, and definite provisions for rendering the health-insurance system an aid to disease prevention. It has been proposed that the preventive force of governmental health insurance should not be limited to the financial relief during sickness, to the medical service afforded, and to the possible economic incentive to reduce sickness, but that it should be greatly increased by linking the health-insurance system to the existing public health agencies. In this sense, "sickness insurance," it is believed, would become a real health measure. It would not be merely a variety of commercial or mutual insurance or another type of public relief, but a practicable method of improving and extending the present facilities for the prevention of disease.

From the viewpoint of the physician and of the public health official, the principal points which suggest themselves for the consideration of "health insurance" are as follows:

1. The sickness expectancy, i. e., the amount of sickness for which medical and surgical service must be provided.
2. Methods of providing adequate medical and surgical relief.
3. Methods of adequate prevention of sickness.

1. Sickness Expectancy.

Although in the absence of accurate statistics of morbidity in the United States it is impossible to arrive at accurate estimates of the amount of sickness occurring among wage earners, nevertheless considerable information concerning sickness expectancy may be obtained by a study of the experience of establishment sick benefit funds. Several estimates have been ventured, some of which have been based on extremely scanty material and some on more reliable data from surveys of actual sickness in industrial communities and from records of disability among employees of establishments. The wide difference in these estimates, from 6 to 9 days of sickness a year per wage earner, has served to call attention to the urgent need for accurate statistics.[1]

(a) *Investigations concerning sickness expectancy.*—In the last two years the results of several "sickness surveys" or censuses have been published and have added materially to the very scanty American morbidity experience previously existing.

By the survey or census method the number of persons found sick on a given day in an enumerated population and recorded, affords the basis for computing the sick rate per 1,000 of the censused population as a whole or in sex, age, and other groups. In 1915–1917,

[1] The American Association for Labor Legislation in 1911 estimated that the American wage earner loses on an average 8.5 days per year on account of sickness. The Federal Commission on Industrial Relations, in its staff report estimated from such records as were then available that the average loss of time from disabling sickness and nonindustrial accidents was about 9 days per year per wage earner. The Social Insurance Commission of California in 1917 from a study of the records of American Benefit Association that were collected by the Federal Bureau of Labor a number of years previous and of such data as were available from similar records in California, estimated that the average loss of time per year per person was 6.5 days.

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person.

Source of data.	Population censused.	Cases of sickness.		Indicated number of days of sickness per person per year of—	
		Number.	Rate per 1,000.	300 days.	365 days.
Records of sick leave of Government clerks in Washington, 1914 [1]	16,000	256	16.0	4.8	5.8
Sickness surveys in various localities by the Metropolitan Life Insurance Co., 1915–1917 [2]	376,573	8,636	22.9	6.9	8.4
New York City Health Department "illness census" of health district No. 1, 1916 [3]	20,169	552	27.4	8.2	10.0
U. S. Public Health Service sickness census of 7 textile villages in South Carolina, 1916 [4]	2,367	114	48.2	14.5	17.6

[1] Warren, B. S., and Sydenstrucker, Edgar: Statistics of Disability—A compilation of some of the data available in the United States Public Health Reports, Apr. 21, 1916.

[2] See appendix B: Combined Sickness Experience of the Company's Surveys, 1915 to 1917, of the Metropolitan Life Insurance Co.'s publication, "Sickness Survey of Principal Cities in Pennsylvania, and West Virginia," by Lee K. Frankel, Ph. D., third vice president, and Louis I. Dublin, Ph. D., statistician. The "combined sickness experience" referred to included the results of sickness surveys made in localities in Pennsylvania, West Virginia, and North Carolina, Kansas City (Mo.), Boston, Rochester, Trenton, and Chelsea (New York City).

[3] Wynne, Shirley Wilmott: Second Illness Census in the Experimental Health District. Monthly Bulletin of the Department of Health of the city of New York, November, 1916.

[4] Sydenstricker, Edgar, Wheeler, G. A., and Goldberger, Joseph: Disabling Sickness Among the Population of Seven Cotton Mill Villages of South Carolina, in Relation to Income. Public Health Reports, Nov. 22, 1918.

With reference to the rates in Table 1 it should be noted that the rate for Government clerks is probably for a preferred occupation. The rate approximates quite closely that for office employees afforded in the experience of the Leipsig local sickness fund during 1887–1905.[1]

The extremely high rate among the population of South Carolina textile villages, on the other hand, is probably due to a relatively low economic status.[2]

[1] See Twenty-fourth Annual Report of the United States Commissioner of Labor, vol. 1, pp. 1281-1341.

[2] For a discussion of the sickness rate among persons of different family income in the population censused see Public Health Reports for Nov. 22, 1918. *Sup. cit.*

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(b) *The authors' investigation concerning sickness expectancy.*—In the investigation here described, data were collected from over 400 sick-benefit associations, covering, in the majority of instances, an experience of three years, have been collected. These data consist of records of disability due to sickness and nonindustrial accidents for which cash benefits have been paid under the various regulations of the associations, and afford this kind of sickness experience among over three-quarters of a million wage earners engaged in many different industries and occupations. The collection and tabulation of the information have not been completed, but it is possible, for purposes of illustration, to present some preliminary figures for groups of wage earners who are members of one or two types of sick-benefit funds. It should be kept in mind that any conclusions suggested by these statistics ought to be regarded as tentative for the reason that more complete data covering a larger sickness experience are yet to be compiled.

More trustworthy information, it is believed, will be afforded when certain inquiries now under way are completed and when the systematic reporting of morbidity among wage earners is begun. An effort is now being made by the United States Public Health Service to collect such statistics of disability as are at present available in the experience among employees of industrial establishments.

For presentation here the disability records of those sick-benefit associations which pay no benefits for the first three days of sickness, or for illnesses of less than four days' duration, have been selected because a similar provision has been included in the health insurance bills that have been introduced in various State legislatures. Data for 22 of these associations have so far been collected. They include approximately 150,000 members,[1] for the great majority of whom a three years' (1914, 1915, and 1916) experience is available, which makes possible a consideration of 463,714 years of exposure of membership.[2] The regulations of the associations, however, are not uniform with respect to the maximum length of the period for which benefits can be paid; for this reason the statistics are presented accord-

[1] It may be noted that the members of the 20 associations were nearly all males, the females constituting a negligible proportion, and, so far as could be ascertained, were adults of the usual wage-earning age period. They were employed in a variety of industrial plants and in various occupations; their sickness experience, however, is not large enough to permit of accurate indications of the influence of occupation. Since industrial accidents are not included, and since the members are fairly well distributed among different occupations in the groups presented in the table which follows, the occupational factor may be disregarded for the purposes of this illustration. To a considerable extent the members are a selected group; some of the associations require applicants for membership to pass a physical examination and to be under 45 years of age, and nearly all had provisions which operated to exclude casual laborers from their membership. The possible influence of administrative methods and practices upon the sick rate is more difficult to determine; the possible effect of the amount of the cash benefit, however, may be disregarded for purposes of approximation, since, for the most part, the cash benefits provided ranged between one-third and one-half of the wages.

[2] Years of exposure of membership were ascertained from the records of the associations by securing the average memberships for each month in each year and computing the average yearly membership by dividing the total of the monthly membership by 12.

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It will be noted that, as may be expected, the waiting period being the same for all associations considered, the average days of compensated sickness per case tends to increase according to the maximum length of the benefit period, and determines the trend of the average days of sickness per member. The importance of the length of the benefit period in determining the amount of sickness for which benefits are to be paid under a system of health insurance is thus suggested. The sickness experience covered in the foregoing statistics is too small to afford definite indications of the experience under any given benefit period except, probably, for those associations having benefit periods of 52 weeks or more. For those six associations, with 440,691 years of exposure, we have a rate of 8.8 days of sickness per year per member.

The sickness expectancy for associations having a maximum benefit period of 26 weeks is, however, of especial interest because some of the health insurance bills introduced in State legislatures contain a similar provision. Unfortunately, until the data obtained are more completely tabulated and adjustments made for varying waiting and benefit periods, our statistics are rather meager. The rate of 6 days of sickness per member per year and of 392 cases of sickness per 1,000 members per year for the group of associations having benefit periods of 23 to 26 weeks appears to be conservatively low,[1] especially when it is compared with the indicated experience obtained in several recent "sickness censuses" in the United States, to which reference has been made, and with the experience of the German

[1] If the average annual case rate of 477 per 1,000 for the entire group of 22 associations included in the foregoing table be used as possibly a more accurate base, the days of sickness per member per year for the 4 associations with a benefit period of 23 to 26 weeks would be 7.3.

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sickness insurance system during the five years prior to the war. With similar waiting and benefit periods, the German experience for the years 1909–1913 showed an average of 8.4 days of compensated sickness per member per year. This was a considerable increase over the rate in 1900 and in years prior, which was about 6 or 7 days.[1]

Year.	Average yearly number of members.	Cases of sickness and confinement.	Days of sickness and confinement.	Average number of days of sickness—		Average number sick during the year per 1,000 members.
				Per sick member.	Per insured member.	
1885	4,290,000	1,804,829	25,301,178	14.1	5.89	420
1890	6,579,539	2,422,350	39,176,689	16.2	5.95	368
1895	7,525,524	2,703,632	46,470,023	17.2	6.17	359
1900	9,520,763	3,679,285	64,916,827	17.6	6.82	386
1905	11,184,476	4,451,148	88,082,296	19.8	7.87	398
1906	11,689,388	4,423,756	87,444,605	19.8	7.48	378
1907	12,138,066	4,956,388	97,148,780	19.6	8.00	408
1908	12,324,094	5,206,148	103,894,299	20.0	8.43	422
1909	12,519,785	5,045,793	103,368,412	20.5	8.25	403
1910	13,069,375	5,197,080	104,708,104	20.1	8.01	398
1911	13,619,048	5,772,388	115,128,905	19.9	8.45	424
1912	13,217,705	5,633,956	112,249,064	19.9	8.49	426
1913	13,566,473	5,710,251	117,436,644	20.6	8.65	421

While the increase was in some measure undoubtedly due to changes in the provisions of the sickness insurance law, it can be interpreted at least partly as an indication of improvements in the medical care of the sick, of the placing of a greater emphasis upon "medical inadvisability to work" rather than on actual "inability to work" as a principle in determining the return of disabled workers to employment, and of a clearer realization of insured persons as to their rights under the insurance system. It would therefore appear that all of the increase can not be attributed to malingering. Without venturing to assume that conditions affecting the health of German wage earners before the war were comparable in all respects with conditions in this country or that the German sickness rate is any guide to the sickness expectancy here, it seems reasonable to have under consideration the probability that the expectancy of sickness which is to receive cash benefits under State or other health insurance laws in the United States will be larger than that indicated by the experience of existing sick-benefit funds, especially if an adequate medical service is afforded.

Probably a conservative estimate of the total amount of sickness which will require medical service under the proposed health-insurance measures would be something between 8 and 9 days per insured person. This includes, of course, the first 3 days of sickness and sicknesses lasting less than 4 days for which medical service must be

[1] The following table presents the German sickness insurance experience for the years 1885, 1890, 1895, 1900, and 1905–1913 (compiled for the years indicated from Statistik des Deutschen Reichs: Die Krankenversicherung):

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equipped for carrying out requires so much time and patience that it becomes a question of increasing his charges to where the cost is prohibitive for the man of ordinary income, or doing his increased service at the old rate of pay and finding that he is not able to earn a decent living for his family.

The physician, when he faces this situation, must decide to confine his practice to the well-to-do, to drop back into the old method of a hurried and inadequate service for a large clientele, or to render his best service to all and content himself in his poverty with the knowledge that his life is worth while.

In another sense an important underlying cause of the present medical and surgical service inadequacy is an economic one. The income of the physician is dependent upon the misfortune of his friends. When his friends are not sick the doctor's income stops. In other words, when his friends are without income they have the further burden of a doctor's bill. This is, to say the least, economically unsound. If the practice of medicine is to be on a sound economic basis the cost of sickness should be met during the period of employment, when there is an income. The problem, then, is to furnish an adequate medical and surgical service to the wage earner, the cost to be met during the period of employment. To guarantee that it be within the reach of all employed persons, provision must be made for the continuance of a substantial part of the income during sickness, else many will not be able to stop work even when sick.

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Under present practices of the medical profession there is a premium placed on sickness. That is to say, the patient who is sick often, or for long periods, is worth much more to his doctor than the patient who is seldom sick. This should be reversed; the premium should, in so far as practicable, be placed on health. With a premium on health payable to the doctor, it goes without saying that it would be an added incentive to him to keep his patients well, and to cure them as quickly as possible when sick. The question, then, is as to the practicability of working out some plan by which all of the good features in present practice may be retained and at the same time add an economic incentive as a further inducement for the doctor to keep his patient well.

If health insurance is to come, and changes in methods of medical practice are to be made, certainly the opportunity is an extraordinary one for placing these practices on an economically sound basis, and for making "sickness" insurance actually a "health" insurance.

It should be thoroughly understood that adequate medical and surgical relief is not possible without adequate pay. Any plan which proposes to reduce the average net income of the physician will surely fail to provide adequate relief. If, as is often stated, a large proportion of the people are not receiving adequate medical treatment, the readjustments made necessary in order to provide proper treatment for all insured persons would very probably mean an increase in the average net income of the physicians. Surely no plan should be countenanced which will make matters worse.

In this connection it is well for physicians to consider the experience of foreign countries under sickness insurance, and the experience of this country under workmen's compensation laws. In Germany, the plan of administration of medical benefits which led to the "doctors' strike," would hardly offer inducements to us to copy the German plan. In Great Britain, the plan has been the subject of much criticism, mainly because of the incentive to malingering, and delays in payments, and methods of payments to the physicians.

After the British law had been in operation for something more than a year, Mr. Lloyd George made the statement that there had been an average increase in the annual income of the physicians of $750 occasioned by the act, and that 22,000 of the 25,000 physicians in England had registered on the panels. The experience in this country under workmen's compensation laws is too well known to need discussion here. That this experience has not been satisfactory is mainly the fault of the physicians themselves. They sat quietly by while the laws were being enacted and made little effort to have the proper provisions incorporated into these acts. The question naturally arises, Shall the physicians spend their time and money fighting these proposed measures, or shall they direct all their efforts

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an advisory medical committee; the other, with an administrative board composed of a chairman, employer, and employee directors, together with a medical director and a health director, with an advisory medical committee. It would appear obvious that in the administration of medical and health matters, medical and health men should have an active part in the management instead of only an advisory authority. The State should have representation through the selection of the chairman and the health director, and physicians should insist on having proper representation on the local and district boards which are to administer the medical benefits, and not be satisfied with an advisory position.

As to the plans for providing medical benefits, it seems to be conceded that free choice of physicians must be provided wherever practicable. Whether this will always provide the best medical service is a question, but the demand of individual freedom in this matter is too strong to be limited, even though the individual may at times exercise this freedom of choice to his own detriment. Furthermore, the efficiency of a physician's treatment would be seriously affected when attending a patient who did not prefer his services. Much may be said in favor of freedom of choice. It would avoid a disturbance of the time-honored relation of the family physician to his patients. With the right to change doctors at will, physicians would still have operative all of the present incentive to please their patients.

It would be through the method of payment that an opportunity would be afforded to take the premium off of sickness and place it indirectly upon health. By fixing the payments on a capitation

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basis, the physician would receive the same amount per patient per year, whether his patients were sick or well. This would indirectly result in making the healthy patient the most desirable to the physician. Under this system there might be some patients left over who had been refused by all of the physicians as undesirable on account of the frequency of their demands on the medical attendant's time. This, however, is liable to occur under any system of free choice. If the number of these left-over patients is small, they may be allotted pro rata. If the number is large, a salaried physician may be employed to attend them. Surely when the patients have the power to change physicians at will, the physician will have the same incentive as he now has to please and render his best service. Furthermore, he will realize that by doing everything possible to keep his patients in health his work will be reduced. On a visitation basis of payment the physician who had sickly patients would have the better income, so that there would be no indirect financial incentive to keep his patients well; on the contrary, the more visits he made, the greater his income. This plan of so much per visit would probably be too expensive for the insurance system, unless in making up the annual budget a fixed amount were allotted for the payment of medical benefits. Such an allotment of a definite amount per insured person would really be equivalent to capitation payment, as it would limit the payment to a fixed amount per capita. It would, however, have the defect of putting a premium on the sick patient.

In this discussion of plans for providing adequate medical and surgical relief, the remuneration of physicians must be presumed to be adequate, else the conditions are liable to be worse under health insurance than they are now. For this reason it might be provided in the organic act that the rate of remuneration must be adequate, and provisions made for a commission to fix the rates. Furthermore, if members of the families of insured persons are to be included in provisions for medical benefits, the rates should be fixed according to the number entitled to medical benefits and not according to the number of insured persons. Obviously, the physician who is to furnish medical treatment to an insured person with wife and child is entitled to three times more than he would be if he is only to furnish it to a single insured person with no dependents, for, as stated above, the sickness expectancy of women and children is very probably as great as that of men in the wage-earning age group.

Before leaving this question of medical benefits it should be stated that it is not just to oppose a proper health insurance bill on the ground that it means cheap contract practice, with all of its known evil. Contract practice can not be objectionable if the physician is paid enough so that he will not have to slight his work in order to make a living.

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will not materially increase the appropriations for their health departments. Owing to this fact there is a decided probability of sickness insurance acts endangering the very existence of State health departments by absorbing all of the funds available for health work. Our statesmen and lawmakers must therefore be careful that proper and ample provisions are made for health machinery in any sickness insurance act.

No provisions have been made in any of the insurance systems of foreign countries for coordinating them with the health agencies; though to a limited extent provisions are made by some for disease prevention and medical research. The English experience has been such that the ministry of health bill now pending provides for the transfer of the national insurance system to the health department.

We should profit by this experience and make ample provision for disease prevention through existing State health agencies. All proposals for health insurance in this country should therefore be carefully scrutinized and all sections providing for disease prevention amended so as to definitely place these functions under the jurisdiction of the health departments. Otherwise there will be duplication of work, confusion of administration and waste of funds. The weightiest of the arguments presented by the proponents of health insurance are based on the probable effect it will have in preventing disease. The question then would seem to be whether existing health

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agencies shall be utilized or new agencies created. Surely some plan can be worked out whereby existing health agencies can be coordinated with health insurance systems and obviate the necessity of creating new machinery. Even if new machinery were created it would be unwise to create it to work independently, so that, after all, existing health agencies would need to be coordinated with the new system.

The general outlines of a plan for coordination were approved by the Annual Conference of State and Territorial Health Officers with the Public Health Service, May, 1916. This plan proposes to utilize the medical referees in carrying it into effect. It is proposed to have these appointed by the State, and commissioned to act as referees for the health insurance system and as health officers for the health department, under the jurisdiction of both agencies.

Following out this general outline, a scheme of organization has been suggested which, it is believed, would work out satisfactorily to both. It is pretty well conceded that medical referees will be required in every locality to see and keep in touch with each sick person in order to certify to his disability prior to the payment of cash benefits. Experience has shown that it is not right to impose the duty of signing the disability certificate upon the physician treating the case. Since the medical referee is considered necessary in the scheme of sickness insurance, and since his duties as referee will require him to pass upon claims in which three parties are interested, viz, the insurer, the insured, and the treating physician, it would appear but proper that he be employed by the State. The additional duties required of him as health officer would not interfere with his usefulness as referee; in fact, they would add to his efficiency and clothe him with the authority of the health department. Such authority would make of him one unit in the health machinery for the health insurance system.

The organization proposed would be about as follows:

1. Make the State commissioner of health an ex officio member of the State health insurance commission.

2. Detail a medical director from the State health department to assist the commission in supervising the administration of the medical benefits and to act as health advisor and director.

3. Detail district medical directors from the State health department to aid in the administration of the medical benefits in their respective districts.

4. Detail from the State health department a sufficient number of local medical officers to act as medical referees and to sign all disability certificates, and to perform such other duties as may be authorized by law or regulation.

To give some idea of the size of such a corps, it may be tentatively estimated that it would require one medical referee to every 4,000 insured persons. In a State with 1,000,000 wage earners, this

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departments. It, however, does not add to the authority of health departments, it only extends their field of usefulness.

The duties of the referee as related to the insurance system would be to see and keep in touch with the sick insured, to certify to their disability, to advise with the treating physician, to advise the insuring agency as to measures calculated to shorten disabilities, and to prevent disabilities among insured persons.

The duties of the referee as related to the health department would be almost identical with the above, with the additional duties of sending duplicates of morbidity and mortality reports to the department, and advising as to any assistance he may need for research into the causes of sickness in his jurisdiction.

For the proper performance of these two sets of duties he would be responsible to each department. But under the organization proposed, a referee would receive State appointment, subject to duty anywhere within the State, so that if for any reason his services were not locally satisfactory he might be shifted to another locality; in fact, there should be a limit to his tour of duty in any one locality to prevent him becoming too thoroughly identified with the local politics or other conditions which might give a bias to his decisions or actions.

The plan has been criticized owing to the fact that it does not place employment of the referee under the control of the local insuring agency, one of the parties interested in his decisions as referee. It would seem obvious that a referee should not be employed by one of the parties at interest. Further criticism has been made that the treating doctors would not submit to supervision by a representative of the State health department. It is hard to understand

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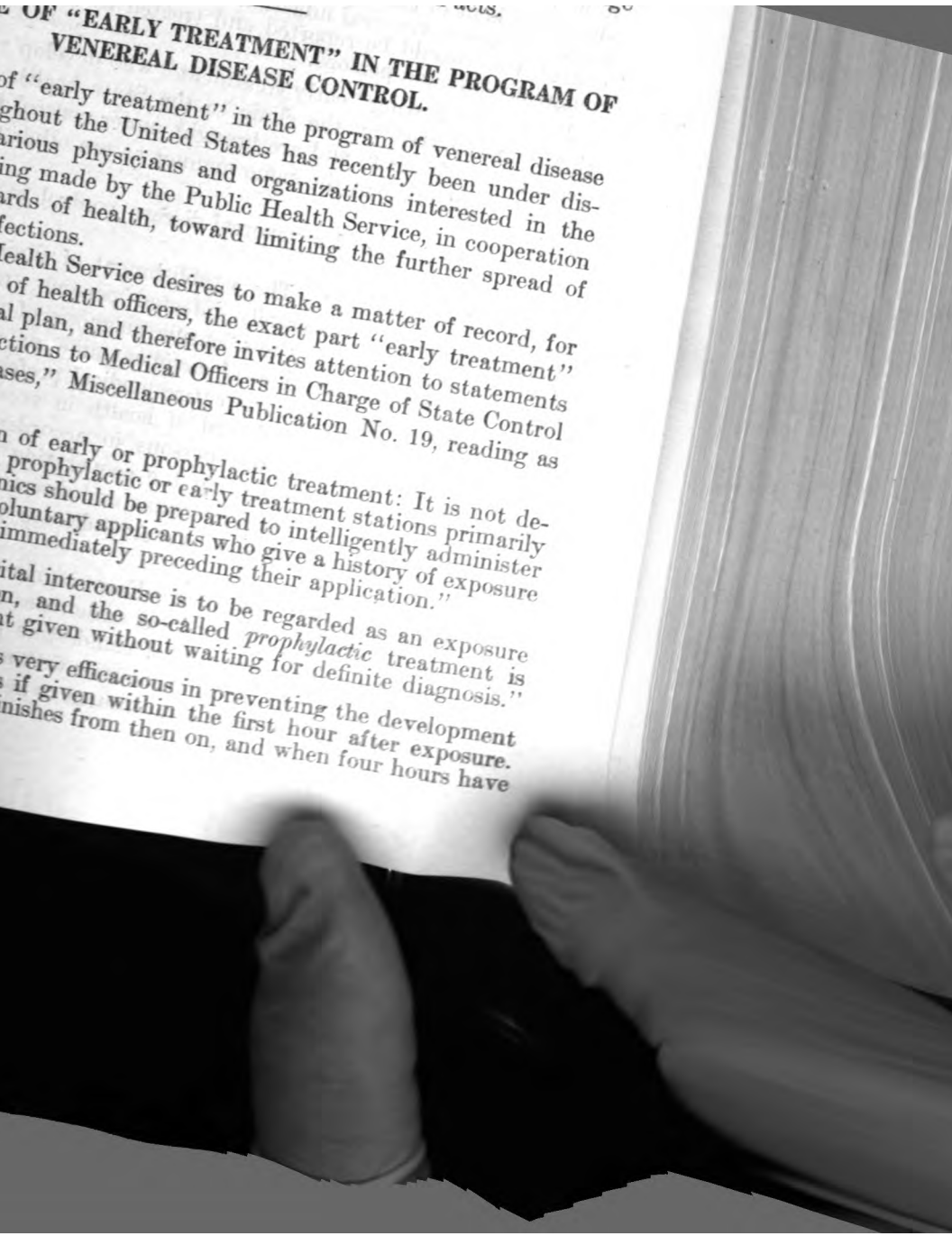

OF "EARLY TREATMENT" IN THE PROGRAM OF VENEREAL DISEASE CONTROL.

of "early treatment" in the program of venereal disease
ghout the United States has recently been under dis-
arious physicians and organizations interested in the
ing made by the Public Health Service, in cooperation
ards of health, toward limiting the further spread of
fections.

Health Service desires to make a matter of record, for
of health officers, the exact part "early treatment"
al plan, and therefore invites attention to statements
ctions to Medical Officers in Charge of State Control
ases," Miscellaneous Publication No. 19, reading as

n of early or prophylactic treatment: It is not de-
prophylactic or early treatment stations primarily
nics should be prepared to intelligently administer
oluntary applicants who give a history of exposure
immediately preceding their application."

ital intercourse is to be regarded as an exposure
n, and the so-called *prophylactic* treatment is
t given without waiting for definite diagnosis."

very efficacious in preventing the development
if given within the first hour after exposure.
nishes from then on, and when four hours have

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elapsed since the exposure it is of very little usefulness. It should, however, with this understanding, be given up to at least 10 hours after exposure. * * * It should always be remembered that complete control of the patient is necessary in order to obtain satisfactory results from early or prophylactic treatment."

On March 24 a circular letter on this subject was issued by the bureau to all venereal-disease clinics and State venereal-disease control officers, reading as follows:

"Your attention is invited to paragraph 10 on page 11 of Miscellaneous Publication No. 19, relative to the administration of early or prophylactic treatment.

"In addition to requesting all persons giving a history of exposure to report at the clinics for reexamination during the period specified, a memorandum record should be made of those calling for treatment. Each person should also be furnished with the circular of information given to infected persons, that he may be fully informed as to the dangerous nature of the venereal diseases.

"Upon the completion of the period of observation, the office memorandum relative to the administration of early treatment should be destroyed, and the report at the end of the month should show the number of persons given early treatment. No permanent record should be kept of the names and addresses of those treated and observed, unless a venereal infection should develop, in which case, of course, they would be reported and treated as would be any other venereally-infected persons."

Persons requesting "early treatment" who develop venereal infections are reported by the clinic to the State health authorities in accordance with law, and are brought under control to prevent the spread of infection in the same manner as are other patients of the clinic.

The general plan for venereal-disease control is grouped under three headings:

1. *Medical measures.*—The establishment of clinics, securing hospital facilities for venereally infected persons; making available laboratory facilities for the scientific diagnosis of venereal diseases; securing wide distribution of arsphenamine or similar products; obtaining the support of the entire medical profession by reporting their cases to the State board of health in accordance with law; treating venereally infected persons in accordance with the best modern methods; and securing the cooperation of druggists in refusing to dispense venereal nostrums and directing prospective purchasers of such remedies to venereal-disease clinics or reputable physicians.

2. *Law-enforcement measures.*—Encouraging the closing of restricted districts; stimulating local authorities to carry on energetic campaigns for the suppression of clandestine prostitution in all its forms; cooperating with local authorities with a view of rehabilitating venereally infected persons; commitment to institutions of venereally

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infected feeble-minded persons; and creating in each community public sentiment for the enforcement of existing laws and ordinances tending to better civic conditions or for prompt enactment of needed legislation.

3. *Educational measures.*—The dissemination of information by leaflets, lectures, and other means for the purpose of warning everyone of the serious nature of the venereal diseases, informing them that the method of spread of these diseases is by personal contact with infected persons, and urging continence as the only safe procedure for avoiding infection.

These measures have already resulted in decreasing the number of exposures to venereal infections. Yet sex attraction is one of the fundamental instincts of the human race, and some persons will continue to expose themselves to the infection of these communicable diseases. The community is entitled to the protection given by prompt "early treatment" in preventing the development of these potential foci of venereal infections, while it is, in the meantime, strengthening the other medical and civic measures of prevention which the condition may require.

PUBLIC HEALTH SERVICE IN THE REPUBLIC OF CHILE.

On January 1, 1919, a law went into effect in the Republic of Chile, providing for the organization and administration of a general health service operating under the provisions of a sanitary code. The general health service is authorized by the Government to supervise and direct all branches of health activity and to have authority over the municipal health departments. The service is under the direction of a director general of health, who is required to be a graduate of medicine and surgery and to have had 10 years' medical practice. The office of director general of health is filled by presidential appointment from a list of eligibles presented by scientific bodies of the Republic, and the appointee is expected to devote his full time to the discharge of the duties of his office.

The law also provides for the establishment of a council of hygiene whose functions are purely consultative. Under the direction of the central health administration there is established an Institute of Hygiene, in charge of a director whose qualifications are the same as those of the director general. This institute consists of four departments, viz, hygiene and demography, chemistry and toxicology, bacteriology and microscopy, vaccination and serotherapy.

There is also established a system of regional sanitary service, conducted by sanitary inspectors of zones comprising the various provinces of the Republic. Each zone is under the administration

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of a sanitary inspector, resident in a provincial capital, whose duties shall be to enforce all laws and ordinances of public health and to carry out the instructions of the director general. A sanitary inspector must be a graduate of medicine and surgery, and must have had at least three years of practice.

DEATHS DURING WEEK ENDED APRIL 5, 1919, IN CITIES.

The following table shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended April 5, 1919. The annual death rates per 1,000 population for the week and for the corresponding week of previous years are also shown. Weekly figures fluctuate widely and caution must be used in their interpretation.

The data are taken from the "Weekly Health Index," April 8, 1919, issued by the Bureau of the Census, Department of Commerce. The populations used in computing the rates are estimated by the Bureau of the Census as of July 1, 1918.

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Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended April 5, 1919—Deaths from all causes and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	53	24.6	C. 21.3	19	8.8
Atlanta, Ga.	201,732	58	15.0	C. 15.8	.....	.....
Baltimore, Md.	[2]660,981	211	16.4	A. 21.3	28	2.2
Birmingham, Ala.	197,670	61	16.1	A. 18.0	.....	.....
Boston, Mass.	785,245	240	15.9	A. 17.8	33	2.2
Buffalo, N. Y.	473,229	163	18.0	C. 19.4	28	3.1
Cambridge, Mass.	111,432	32	15.0	A. 16.5	5	2.3
Chicago, Ill.	2,596,681	790	15.9	A. 16.4	170	3.4
Cincinnati, Ohio.	418,022	147	18.3	C. 24.8	40	5.0
Cleveland, Ohio.	810,306	218	14.0	C. 13.6	71	4.6
Columbus, Ohio.	225,296	83	19.2	C. 21.8	29	6.7
Dayton, Ohio.	130,655	41	16.4	C. 25.9	.....	.....
Denver, Colo.	.....	78	.....	A.	10	.....
Fall River, Mass.	128,392	25	10.2	C. 14.2	3	1.2
Grand Rapids, Mich.	135,450	35	13.5	C. 13.9	.....	.....
Indianapolis, Ind.	289,577	109	19.6	C. 16.9	.....	.....
Jersey City, N. J.	318,770	97	15.9	C. 21.6	.....	.....
Kansas City, Mo.	313,785	107	17.8	C. 24.1	36	6.0
Los Angeles, Calif.	568,495	168	15.4	A. 12.8	19	1.7
Louisville, Ky.	242,707	71	15.3	C. 22.3	16	3.4
Lowell, Mass.	109,081	37	17.7	A. 17.7	6	2.9
Memphis, Tenn.	154,759	79	26.6	C. 20.9	12	4.0
Milwaukee, Wis.	453,481	135	15.5	A. 13.8	48	5.5
Minneapolis, Minn.	383,442	85	11.6	C. 21.2	.....	.....
Nashville, Tenn.	119,215	49	21.4	C. 20.1	12	5.2
New Haven, Conn.	154,865	45	15.2	C. 17.8	.....	.....
New Orleans, La.	382,273	131	17.9	A. 21.2	.....	.....
New York, N. Y.	5,215,879	1,774	17.7	C. 21.6	480	4.8
Oakland, Calif.	214,206	40	9.7	A. 11.1	.....	.....
Philadelphia, Pa.	1,761,371	582	17.2	[3]18.8	98	2.9
Pittsburgh, Pa.	563,303	206	18.1	C. 24.3	75	6.6
Portland, Oreg.	.....	58	.....	C.	11	.....
Providence, R. I.	263,613	83	16.4	C. 21.8	14	2.8
Richmond, Va.	160,719	45	14.6	C. 19.5	7	2.3
Rochester, N. Y.	264,856	79	15.6	C. 16.1	.....	.....
St. Louis, Mo.	779,951	201	13.4	C. 15.3	54	3.6
St. Paul, Minn.	257,699	69	14.0	C. 15.8	.....	.....
San Francisco, Calif.	478,330	142	15.5	C. 15.5	27	2.9
Seattle, Wash.	.....	67	.....	A.	8	.....
Spokane, Wash.	.....	29	.....	C.	4	.....
Syracuse, N. Y.	161,404	52	16.8	C. 24.9	6	1.9
Toledo, Ohio.	262,234	76	15.1	A. 16.2	36	7.2
Washington, D. C.	401,681	131	17.0	A. 18.6	17	2.2
Worcester, Mass.	173,650	52	15.6	C. 24.9	.....	.....

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control knowledge of when, where, and under what conditions cases are oc

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK EN

CAMP DEVENS ZONE, MASS.

	Cases.
Measles:	
Lunenburg	6
Tuberculosis, pulmonary:	
Ayer	1
Whooping cough:	
Lancaster	1

CAMP DIX ZONE, N. J.

Chicken pox:	
New Hanover Township	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chancroid	2
Diphtheria	1
Gonorrhea	5
Measles	16
Smallpox	7
Syphilis	1

CAMP FUNSTON ZONE, KANS.

Chicken pox:	
Junction City	2
Manhattan	3
Diphtheria:	
Junction City	1
Gonorrhea:	
Manhattan	6
Influenza:	
Cleburne	3
Irving	5
Mumps:	
Junction City	8
Manhattan	5
Scarlet fever:	
Junction City	1
Manhattan	6

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Columbus:	
Cerebrospinal meningitis	1
Diphtheria	1
Dysentery	1
Gonorrhea	2

GAS AND FLAME SCHOOL ZONE, G

Columbus—Continued:	
Measles	
Mumps	
Pellagra	
Pneumonia	
Smallpox	
Syphilis	
Tuberculosis	
Whooping cough	
Girard:	
Smallpox	
Muscogee County:	
Diphtheria	
Measles	
Mumps	
Smallpox	
Tuberculosis	
Whooping cough	

CAMP GORDON ZONE

Atlanta:	
Anthrax	
Chicken pox	
Diphtheria	
Erysipelas	
Gonorrhea	
Influenza	
Measles	
Mumps	
Pneumonia	
Scarlet fever	
Smallpox	
Syphilis	
Tuberculosis	

GULFPORT HEALTH DIST

Chicken pox:	
Gulfport	
Influenza:	
Gulfport	
Pascagoula	

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GULFPORT HEALTH DISTRICT, MISS.—continued.

	Cases.
Malaria:	
Biloxi	1
Gulfport	7
Handsboro	1
Kiln	1
Logtown	1
Moss Point	2
Orange Grove	1
Pascagoula	1
Pass Christian	1
Mumps:	
Biloxi	8
Gulfport	6
Handsboro	3
Kreole	1
Lyman	2
Mississippi City	6
Pellagra:	
Beauvoir	1
Pneumonia:	
Biloxi	4
DeLisle	1
Gulfport	1
Kiln	1
Lyman	1
Pneumonia, broncho:	
Mississippi City	2
Stanlard	1
Tuberculosis:	
Gulfport	1
Tuberculosis, pulmonary:	
Moss Point	1
Whooping cough:	
Biloxi	1
DeLisle	7
Escatawpa	2
Ocean Springs	4

CAMP A. A. HUMPHREYS ZONE, VA.

Alexandria:	
Influenza	1
Pneumonia	2
Smallpox	6
Tonsilitis	1
Typhoid fever	2
Fredericksburg:	
Influenza	1
Mumps	1
Whooping cough	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	2
Mumps	4
Typhoid fever	1
Whooping cough	1
Government clinic:	
Chancroid	2
Gonorrhea	16
Syphilis	17

CAMP LEE ZONE, VA.

Ettricks:	
Tuberculosis	1
Petersburg:	
Measles	7
Scarlet fever	2

CAMP LEE ZONE, VA.—continued.

	Cases.
Petersburg—Continued:	
Syphilis	4
Tuberculosis	2
Typhoid fever	1
Prince George County:	
Whooping cough	1

CAMP LEWIS ZONE, WASH.

Influenza:	
Lake City	1
Measles:	
Lake City	1
Mumps:	
American Lake	4
Ingleside	1
Parkland	1
Spanaway	1
Pneumonia:	
Lake City	1

CAMP MERRITT ZONE, N. J.

Chicken pox:	
Englewood	12
Influenza:	
Edgewater	1
Englewood	2
Measles:	
Haworth	1
Mumps:	
Englewood	1
Pneumonia:	
Englewood	2
Scarlet fever:	
Closter	1
West Englewood	1
Syphilis:	
Englewood	1
Tuberculosis:	
Bergenfield	1
Whooping cough:	
Tenafly	1

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Colbert County:	
Diphtheria	1
Mumps	1
Florence, and Lauderdale County:	
Diphtheria	1
Chicken pox	3
Mumps	1
Smallpox	3
Nitrate plant No. 2:	
Chancroid	6
Erysipelas	1
Gonorrhea	1
Influenza	3
Pneumonia	1
Syphilis	8
Typhoid fever	1

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Chancroid	1
Gonorrhea	21
Measles	8
Syphilis	13
Tuberculosis	

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CAMP PIKE ZONE, ARK.

	Cases.
Galloway:	
Tuberculosis	1
Little Rock:	
Chicken pox	10
Erysipelas	1
Gonorrhea	20
Influenza	1
Malaria	1
Measles	1
Mumps	7
Smallpox	1
Syphilis	11
Tonsilitis	1
Tuberculosis	3
North Little Rock:	
Erysipelas	1
Influenza	1
Malaria	1
Mumps	2
Scarlet fever	4
Varioloid	1
Scotts:	
Gonorrhea	1
Influenza	3
Syphilis	2

CAMP POLK ZONE, N. C.

Chicken pox:	
Durham	2
Raleigh	3
Gonorrhea:	
Durham	9
Raleigh	3
Wake Forest Township	1
Woodsdale Township	2
Measles:	
Durham	8
Durham Township	2
Mumps:	
Durham	7
Raleigh	1
Pellagra:	
Durham Township	1
Smallpox:	
Durham	2
Durham Township	1
Raleigh Township	1
Syphilis:	
Durham	8
Durham Township	1
Raleigh	1
Tuberculosis:	
Durham Township	2
Whooping cough:	
Raleigh	1
White Oak Township	1

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Chicken pox:	
Norfolk	2
Ocean View	1
Diphtheria:	
Norfolk	2
Influenza:	
Norfolk	6
Measles:	
Portsmouth	3

PORTSMOUTH AND NORFOLK DISTRICT, VA.—CON

Pneumonia:	
Portsmouth	
Scarlet fever:	
Portsmouth	
Smallpox:	
Norfolk	
Norfolk County	
Tuberculosis:	
Portsmouth	

CAMP SHERMAN ZON

Chillicothe:	
Diphtheria	
Scarlet fever	
Trachoma	
Tuberculosis, pulmonary	
Mumps	
Government clinic:	
Gonorrhea	
Union Township:	
Scarlet fever	

SOUTHER FIELD ZO

Americus:	
Influenza	
Rabies in animal	

CAMP ZACHARY TAYLOR ZON

Cerebrospinal meningitis:	
Louisville	
Chicken pox:	
Louisville	
Diphtheria:	
Louisville	
Jefferson County	
Gonorrhea:	
Jefferson County	
Government clinic	
Jail clinic	
Influenza:	
Louisville	
Jefferson County	
Measles:	
Louisville	
Pneumonia:	
Louisville	
Jefferson County	
Scarlet fever:	
Louisville	
Jefferson County	
Jeffersonville	
Syphilis:	
Government clinic	
Jail clinic	
Tuberculosis, pulmonary:	
Jefferson County	
Louisville	
Typhoid fever:	
Louisville	

TIDEWATER HEALTH DI

Chancroid:	
Government clinic	
Chicken pox:	
Phoebus	
Diphtheria:	
Newport News	

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TIDEWATER HEALTH DISTRICT, VA.—continued.

	Cases.
Diphtheria carrier:	
Newport News	1
Gonorrhea:	
Newport News	7
Government clinic	11
Measles:	
Newport News	1
Meningitis, tubercular:	
Riverview	1
Mumps:	
Newport News	1
Phoebus	1
Scarlet fever:	
Hampton	2
Smallpox:	
Newport News	2
Fox Hill	4
Syphilis:	
Government clinic	3
Tuberculosis:	
Newport News	3
Riverview	1
Garden City	1
Buckroe	1
Varioloid:	
Phoebus	1
Venereal, mixed:	
Government clinic	2

CAMP TRAVIS ZONE, TEX.

	Cases.
San Antonio:	
Chancroid	4
Chicken pox	4

CAMP TRAVIS ZONE, TEX.—continued.

	Cases.
San Antonio—Continued.	
Diphtheria	1
Gonorrhea	14
Measles	5
Mumps	1
Pneumonia	1
Smallpox	3
Syphilis	7
Tuberculosis	5
Whooping cough	1

CAMP UPTON ZONE, N. Y.

Brook Haven:	
Mumps	3
Septic sore throat	3
Patchogue:	
Chicken pox	1
Diphtheria	5
Pneumonia	2
Riverhead:	
Chicken pox	4
Measles	3
Pneumonia	1

WILMINGTON SANITARY DISTRICT, N. C.

Wilmington:	
Diphtheria	1
Influenza	1
Malaria	1
Pneumonia	2
Tuberculosis	5
Tetanus	2
Typhoid fever	2

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended April 4, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	667.08	705.60
All troops in the United States	1,274.67	1,309.41
American Expeditionary Forces	467.31	501.54
Annual admission rate per 1,000 (disease only)	585.38	612.58
All troops in the United States	1,077.26	1,086.26
American Expeditionary Forces	420.95	452.48
Noneffective rate per 1,000 on day of report	45.23	45.25
All troops in the United States[1]	61.78	60.50
American Expeditionary Forces	39.71	40.09
Annual death rate per 1,000 (all causes)	7.20	8.91
All troops in the United States[1]	8.53	9.10
American Expeditionary Forces	6.76	8.84
Annual death rate per 1,000 (disease only)	5.68	7.26
All troops in the United States[1]	7.56	7.96
American Expeditionary Forces	5.06	7.02

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

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Cases of special diseases reported during the week ended Apr. 4,

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.
				Total.	New infections.				
Bowie	2	.....	1	31	11	3	2	1	.....
Bragg	.....	.....	.....	.....	.....	.....	.....	.....	.....
Custer	2	.....	.....	11	9	.....	2	.....	1
Devens	3	1	.....	14	6	1	.....	.....	.....
Dix	1	.....	.....	22	13	1	3	.....	.....
Dodge	3	.....	.....	15	11	.....	.....	.....	3
Eustis	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fremont	.....	.....	.....	.....	.....	.....	.....	.....	.....
Funston	.....	.....	.....	4	.....	.....	.....	.....	4
Gordon	2	.....	.....	15	.....	11	.....	.....	.....
Grant	4	.....	.....	13	.....	.....	4	.....	5
Humphreys	.....	.....	.....	3	1	.....	.....	.....	.....
Jackson	5	.....	.....	22	.....	5	.....	1	.....
J. E. Johnston	.....	.....	.....	1	1	.....	.....	.....	.....
Kearny	.....	.....	.....	5	2	.....	.....	.....	.....
Henry Knox	.....	.....	.....	6	.....	.....	.....	.....	.....
Las Casas	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lee	.....	.....	3	12	6	.....	.....	.....	2
Lewis	3	.....	1	13	1	.....	.....	1	2
Meade[1]	.....	.....	.....	26	4	.....	.....	.....	3
Pike	3	.....	.....	37	.....	2	1	1	.....
Shelby	1	.....	.....	12	6	1	.....	.....	.....
Sherman	1	.....	.....	18	.....	4	.....	.....	2
Taylor	4	.....	.....	12	7	9	.....	.....	4
Travis	3	.....	1	52	7	.....	7	.....	.....
Upton	3	.....	1	39	5	4	.....	1	2
Wheeler	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northeastern Department	.....	.....	.....	4	2	1	.....	.....	.....
Eastern Department	.....	.....	.....	20	5	4	.....	.....	2
Southeastern Department	.....	.....	2	39	6	.....	.....	.....	.....
Central Department	.....	.....	.....	1	.....	.....	.....	.....	.....
Southern Department	13	.....	.....	50	.....	38	.....	1	1
Western Department	3	.....	1	14	10	22	1	.....	3
Aviation camps	2	2	1	23	.....	5	.....	.....	.....
Port of embarkation:									
Hoboken	14	1	.....	25	6	43	3	1	7
Newport News	15	.....	.....	31	5	13	5	.....	5
Alcatraz Disciplinary Barracks	.....	.....	.....	2	1	.....	.....	.....	.....
Leavenworth Disciplinary Barracks	2	.....	1	.....	.....	.....	.....	.....	.....
Columbus Barracks	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jefferson Barracks	1	.....	.....	2	1	1	.....	.....	.....
Fort Logan	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort McDowell	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Monroe	.....	.....	.....	3	.....	.....	1	.....	.....
Fort Sill	.....	.....	.....	6	6	2	.....	.....	.....
Fort Slocum	.....	.....	.....	1	1	.....	.....	.....	.....
Fort Thomas	.....	.....	.....	2	2	.....	.....	.....	.....
West Point	.....	.....	.....	1	.....	.....	.....	.....	.....
Arsenals	.....	.....	1	8	.....	.....	.....	.....	3
Miscellaneous small stations	.....	.....	.....	15	.....	.....	.....	.....	.....
Total	90	4	13	630	135	170	29	7	49

[1] One case of paratyphoid fever reported from Camp Meade.

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Number of deaths, and annual rates per 1,000 at large camps in the United States, week ended Apr. 4, 1919.

Camp.	Strength.	Deaths.		Annual death rate per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Bowie	4,778	1	1	10.88	10.88
Bragg	905				
Custer	5,617	3	3	27.77	27.77
Devens	8,677	4	4	23.97	23.97
Dix	16,910				
Dodge	7,136	1	1	7.28	7.28
Eustis	491				
Fremont	290				
Funston	5,956	1	1	8.73	8.73
Gordon	7,939	1	1	6.54	6.54
Grant	14,017	2	2	7.42	7.42
Humphreys	3,322				
Jackson	10,846				
J. E. Johnston	377				
Kearny	8,530				
Henry Knox	11,863				
Las Casas	1,656				
Lee	10,841	1		4.79	
Lewis	6,134				
Meade	14,440				
Pike	7,157	2	2	14.53	14.53
Shelby	3,619				
Sherman	11,707	2	2	8.88	8.88
Taylor	13,568	3	3	11.50	11.50
Travis	6,625	2	2	15.69	15.69
Upton	27,570	1	1	1.88	1.88
Wheeler	568				
Northeastern Department	3,370				
Eastern Department	20,088				
Southeastern Department	8,390	1	1	6.19	6.19
Central Department	5,309				
Southern Department	35,135	8	7	11.84	10.36
Western Department	11,280	1	1	4.60	4.60
Aviation camps	20,780	7	1	17.51	2.50
Port of embarkation:					
Hoboken	51,653	4	4	4.02	4.02
Newport News	25,516	12	12	24.46	24.46
All others	93,696	22	21	12.20	11.65
Total	481,668	79	70	8.53	7.56

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	9.72	14.07	15.93	17.71
Dysentery	.43	.41	.57	.28
Malaria	1.40	1.44	.39	.10
Venereal	68.05	76.69	34.97	35.33
Paratyphoid	.10			.28
Typhoid		.31	1.04	1.73
Measles	3.13	4.45	3.07	2.04
Meningitis	.75	.72	1.12	2.13
Scarlet fever	5.20	3.41	.39	.69
Influenza	18.36	29.08		

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CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended April 12, 1919.

Alabama.—State totals: Typhoid fever 3, malaria 3, s measles 82, scarlet fever 3, diphtheria 6, whooping cou culosis 5, meningitis 1, pneumonia 3, influenza 28, mump

Arkansas.—State totals: Influenza 126 cases (of wh Springs 110), measles 80, malaria 55, chickenpox 19, s whooping cough 23, tuberculosis 12, diphtheria 5, scar typhoid fever 4, pellagra 3, trachoma 1, ophthalmia 1.

California.—Third wave of influenza shows a decline wit reported. Smallpox: 28 cases reported (of which in M Tulare County 11, San Jose 3, Los Angeles 3, balance over State. Typhoid fever: 11 cases (of which in San F Los Angeles 2, and 1 each in Sacramento County, Stockto Sacramento, Richmond, and Oakland. San Francisc case each of poliomyelitis and meningitis. Lethargic Contra Costa County 1, San Francisco 1.

Connecticut.—Cerebrospinal meningitis, New Haven 1. State total, 128 cases.

Florida.—State totals: Typhoid fever 34, scarlet fe theria 15, pneumonia 30. Meningitis: Jacksonville County 1, Citrus County 1.

Georgia.—State totals: Hookworm 2, chicken pox 29, dysentery (amebic) 5, dysentery (bacillary) 8, Germa gonorrhea 86, influenza 73, malaria 40, measles 44, mum monia (acute lobar) 47, poliomyelitis 2, rabies (in anim fever 9, septic sore throat 4, smallpox 87, syphilis 49 trachoma 2, tuberculosis (pulmonary) 15, tuberculosis pulmonary) 4, typhoid fever 5, whooping cough 26, ophthalmia 1.

Illinois.—Diphtheria: Cases reported 160, of which in Scarlet fever: 119 cases, of which in Chicago 68, Stockto ford 7, Oglesby 6, Mount Sterling 4. Smallpox: 78 cas in Union Precinct (Union County) 11, Peoria 9, Hampshi 5, Fairmount 5, Pekin 4, Palmyra 4. Meningitis: Chic Poliomyelitis: Chicago 1, Danvers 1. Lethargic encep cago 3. A total of 201 cases of influenza reported, Chica 144, with no recrudescence. Gonorrhea 89, syphilis 89

Indiana.—Scarlet fever reported in Hendricks, Kos nings, Porter, Clay, Whitley, and St. Joseph Counties reported in the counties of Parke, Vermilion, Jennings, Clay, and in Elkhart, Fort Wayne, Rosedale, and Col Measles present in Fortville. Mumps reported in Lagra theria by counties: Hendricks 7, Kosciusko 3, Blackford

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Clay 4, Orange 1, Randolph 1, Decatur 1. Typhoid fever: Kosciusko County 1, Lake County 1. Rabies: Clinton 1. Syphilis 29, gonorrhea 48, chancroid 2.

Iowa.—Chancroid: Postville 1. Chicken pox: Davenport 1, Dubuque 1. Diphtheria: Council Bluffs 1, Des Moines 3, Dubuque 1. Gonorrhea: Battle Creek 1, Cedar Rapids 2, Davenport 12, Dubuque 3, Elkader 1, Low Moor 1, Manson 3, Monona 1, Mount Pleasant 1, Newton 1, Ottumwa 2, Read 1, Spencer 1. Measles: Davenport 1, Dubuque 1, Forest City 7. Mumps: Dubuque 1, Northwood 2. Scarlet fever: Armstrong 1, Boone 1, Burlington 2, Cedar Rapids 1, Denmark 3, Des Moines 12, Ottumwa 2. Smallpox: Albia 10, Boone 10, Buffalo 1, Carbon 5, Cedar Rapids 4, Cedar Falls 1, Council Bluffs 3, Davenport 18, Des Moines 6, Fort Dodge 1, Mason City 1, Ottumwa 1. Syphilis: Davenport 16, Des Moines 1, Iowa City 1, Ottumwa 3. Whooping cough: Davenport 1. In rural districts of following counties: Scarlet fever: Boone 1, Clayton 1, Dallas 1, Lee 1, Marion 1, Monroe 1, Plymouth 3, Poweshiek 1. Smallpox: Buchanan 4, Cherokee 1, Grundy 2, Jones 1, Mahaska 1, Montgomery 1. Influenza: 46 cases reported.

Kansas.—Meningitis: Herington 1, Severy 1. State totals: Smallpox 89, typhoid fever 6, diphtheria 25, scarlet fever 58, influenza 737.

Louisiana.—State totals: Lethargic encephalitis 4, smallpox 34, meningitis 1, influenza 27, typhoid fever 18, diphtheria 13, gonorrhea 64, syphilis 13, chancroid 3.

Maine.—Chickenpox: Portland 6. Diphtheria: Portland 1, Oldtown 1, Waterville 1, Enfield 1, Garland 1, Westbrook 2, Winslow 8, Corinna 1. Gonorrhea: Lexington 1, Millbridge 1, Rumford 1, Skowhegan 1, Bangor 1, Camden 1, Auburn 1, Bath 1, Freeport 1, Gardiner 1, Lewiston 1, Portland 13, Fort Fairfield 2, Greenville 3. Mumps: Portland 5. Ophthalmia neonatorum: Portland 1. Scarlet fever: Hudson 2, Freeport 1, Kenduskeag 6, Portland 8. Syphilis: Augusta 2, Portland 4, Bangor 2, Greenville 1. Tuberculosis: 17 cases reported. Typhoid fever: Berwick 1, Sanford 1. Whooping cough: Portland 1. Influenza: Cases reported 179.

Massachusetts.—Unusual prevalence of measles by cities as follows: Fall River 69, Taunton 17, Wareham 15, Charlton 13. Diphtheria: Fall River 7. Scarlet fever: Salem 5.

Minnesota.—Smallpox (new foci): Goodhue County, Red Wing 15; Houston County, Caledonia Township 1; Hubbard County, Park Rapids 1. Cerebrospinal meningitis 1, poliomyelitis 1, syphilis 50, gonorrhea 81, chancroid 1.

New Jersey.—Cases reported: Influenza 290, pneumonia 182. Smallpox: Atlantic County (Hamilton Township) 1, Weymouth Township 5, Cape May County (Cape May) 3, West Cape May 4. No unusual prevalence of other diseases noted.

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Washington Courthouse 7, Steubenville 10, Portsmouth 15, Toledo
Pike County (Camp Creek Township) 11.

Oregon.—Influenza: Portland 11 cases and 1 death, Hood Ri
County 10 cases.

Vermont.—No unusual prevalence.

Virginia.—Influenza: 101 cases reported. Smallpox by counti
Alexandria 5, Middlesex 4, Norfolk 5. Cerebrospinal meningit
Fredericksburg 1.

Washington.—Unusual prevalence of contagious diseases note
Smallpox: Seattle 32, Tacoma 7, Yakima 12, Walla Walla 4, Ce
tralia 4, Hoquiam 2, Renton 2, Edmonds 1. Mumps: Seattle 2
Tacoma 9, Yakima 38, Vancouver 3, Bremerton 6, Pierce County 2

ANTHRAX.

Massachusetts Report for March, 1919.

During March, 1919, one case of anthrax was reported in Massa
chusetts.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Case
Gas and flame school zone, Ga. and Ala.....	1	Camp Zachary Taylor zone, Ky. and Ind.....	

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CEREBROSPINAL MENINGITIS—Continued.

State Reports for March, 1919.

Place.	New cases reported.	Place.	New cases reported.
Massachusetts:		Massachusetts—Continued.	
Barnstable County—		Suffolk County—	
Falmouth (town)	1	Boston	7
Bristol County—		Worcester County—	
New Bedford	1	Clinton (town)	1
Essex County—		Worcester	1
Lawrence	1		
Lynn	2	Total	19
Franklin County—			
Greenfield (town)	1	Oklahoma:	
Middlesex County—		Creek County	1
Arlington (town)	1	Jackson County	1
Norfolk County—		Tulsa County	1
Dedham (town)	1		
Wrentham (town)	1	Total	3
Plymouth County—			
Brockton	1		

City Reports for Week Ended Mar. 29, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Appleton, Wis	2		Newark, N. J	2	
Atlanta, Ga	1		New Brunswick, N. J	1	
Baltimore, Md	3	1	New Haven, Conn	1	
Bayonne, N. J	1		Newton, Mass	1	1
Chicago, Ill	2	1	New York, N. Y	12	4
Dayton, Ohio	5	1	Norfolk, Va	1	1
Detroit, Mich	2	1	Passaic, N. J		2
Galveston, Tex		1	Perth Amboy, N. J		1
Kansas City, Mo	2		Piqua, Ohio		1
Leominster, Mass		1	Portland, Oreg	1	
Lexington, Ky		1	Portsmouth, Va	1	1
Long Beach, Calif	1	1	Salt Lake City, Utah	1	1
Los Angeles, Calif	1		San Francisco, Calif	1	1
Louisville, Ky		1	Syracuse, N. Y	1	1
Macon, Ga		1	Warren, Pa	1	
Marion, Ind		1	Wilkes-Barre, Pa	2	
Milwaukee, Wis	2	2			

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	2	Picric acid plant zone, Ga	1
Camp Jackson zone, S. C	2	Tidewater health district, Va	3
Muscle Shoals sanitary district, Ala	6	Camp Travis zone, Tex	4

DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	1	Camp Sherman zone, Ohio	1
Camp Funston zone, Kans	1	Camp Zachary Taylor zone, Ky. and Ind	7
Gas and flame school zone, Ga. and Ala	2	Tidewater health district, Va	1
Camp Gordon zone, Ga	1	Camp Travis zone, Tex	1
Muscle Shoals sanitary district, Ala	2	Camp Upton zone, N. Y	5
Portsmouth and Norfolk County health district, Va	2	Wilmington sanitary district, N. C	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 811.

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GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.
Fayetteville sanitary district, N. C.	5
Camp Funston zone, Kans.	6
Gas an l flame school zone, Ga. and Ala.	2
Camp Gordon zone, Ga.	17
Camp Jackson zone, S. C.	16
Muscle Shoals sanitary district, Ala.	1
Picric acid plant zone, Ga.	21
Camp Pike zone, Ark.	21
Camp Polk zone, N. C.	15
Camp Sherman zone, Ohio.	9
Camp Zachary Taylor zone, Ky. and Ind.	81
Tidewater health district, Va.	13
Camp Travis zone, Tex.	14

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.
Camp Funston zone, Kans.	8
Camp Gordon zone, Ga.	4
Gulfport health district, Miss.	13
Camp A. A. Humphreys zone, Va.	2
Camp Lewis zone, Wash.	1
Camp Merritt zone, N. J.	3
Muscle Shoals sanitary district, Ala.	3
Camp Pike zone, Ark.	5
Portsmouth and Norfolk County health district, Va.	6
Souther field zone, Ga.	1
Camp Zachary Taylor zone, Ky. and Ind.	15
Wilmington sanitary district, N. C.	1

LETHARGIC ENCEPHALITIS.

Cases Reported for Week Ended Apr. 12, 1919.

	Cases.
California:	
San Francisco	1
Stockton (week ended Apr. 5)	1
Contra Costa County	1
Illinois:	
Chicago	3
Louisiana:	
Acadia Parish	1
Bienville Parish	1
East Carroll Parish	1
Iberia Parish	1
Ohio:	
Bellefontaine	1
Lorain	1
Greene County (Bath Township)	1
Rhode Island:	
Providence	1
Texas:	
Corpus Christi (week ended Apr. 5)	1

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.
Gulfport health district, Miss.	16
Camp Pike zone, Ark.	2
Wilmington sanitary district, N. C.	1

City Reports for Week Ended Mar. 29, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Austin, Tex.	2		Memphis, Tenn.	1	
Camden, N. J.	1		New Orleans, La.	1	
Charleston, S. C.		1	Palestine, Tex.	6	
Chicago, Ill.		1	Springfield, Mo.		1
Houston, Tex.		2	Tuscaloosa, Ala.	1	
Joplin, Mo.	1				

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MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Cases.
Camp Devens zone, Mass	6	Camp Pike zone, Ark	1
Fayetteville sanitary district, N. C	16	Camp Polk zone, N. C	10
Gas and flame school zone, Ga. and Ala	10	Portsmouth and Norfolk County health district, Va	3
Camp Gordon zone, Ga	7	Camp Zachary Taylor zone, Ky. and Ind	9
Camp Lee zone, Va	7	Tidewater health district, Va	1
Camp Lewis zone, Wash	1	Camp Travis zone, Tex	5
Camp Merritt zone, N. J	1	Camp Upton zone, N. Y	3
Picric-acid plant zone, Ga	8		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 811.

PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Cases.
Gas and flame school zone, Ga. and Ala	1	Camp Polk zone, N. C	1
Gulfport health district, Miss	1		

State Reports for March, 1919.

Place.	New cases reported.	Place.	New cases reported.
Massachusetts:		Oklahoma—Continued:	
Essex County—		Haskell County	2
Haverhill	1	Lincoln County	12
Middlesex County—		Le Flore County	1
Melrose	1	McCurtain County	3
		Marshall County	4
Total	2	Pushmataha County	1
		Pittsburg County	1
Oklahoma:		Sequoyah County	4
Atoka County	2	Tulsa County	2
Bryan County	3		
Creek County	5	Total	41
Caddo County	1		

City Reports for Week Ended Mar. 29, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Austin, Tex		1	Galveston, Tex		1
Beaumont, Tex		1	Memphis, Tenn	1	1
Birmingham, Ala	2	1	Nashville, Tenn	1	
Charleston, S. C		1	Pasadena, Calif		1
Durham, N. C		1	Richmond, Va		1

PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Cases.
Gas and flame school zone, Ga. and Ala	3	Portsmouth and Norfolk County health district, Va	1
Camp Gordon zone, Ga	2	Camp Zachary Taylor zone, Ky. and Ind	3
Gulfport health district, Miss	11	Camp Travis zone, Tex	1
Camp A. A. Humphreys zone, Va	2	Camp Upton zone, N. Y	5
Camp Lewis zone, Wash	1	Wilmington sanitary district, N. C	2
Camp Merritt zone, N. J	2		
Muscle Shoals sanitary district, Ala	1		

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	2			
Y.	9	2		
	39	11		
	1			
	3	1		
	2			
	1	1		
	2	1		
Camden, N. J.	4			
Cape Girardeau, Mo.	2			
Charleston, W. Va.	1			
Chicago, Ill.			324	
Cleveland, Ohio.	35	47		
Cohoes, N. Y.	1			
Cumberland, Md.	1	2		
Dayton, Ohio.	2	5		
Detroit, Mich.	11	25	16	
Duluth, Minn.	7	1		
East Orange, N. J.			6	
Elmira, N. Y.	6	5		
Englewood, N. J.	3	1		
Findlay, Ohio.	1	1		
Grand Rapids, Mich.	18	1		
Green Bay, Wis.	4	4		
Greenwich, Conn.	1			
Hackensack, N. J.	2	2		
Harrison, N. J.	1			
Hartford, Conn.	1	1		
Haverhill, Mass.	7	1		
Highland Park, Mich.	11	7		
High Point, N. C.	1			
Hoboken, N. J.	2	6		
Hudson, N. Y.	1			
Independence, Mo.			8	
Ironton, Ohio.	1	1		
Jamestown, N. Y.			7	
Jersey City, N. J.			8	
Joplin, Mo.	2			
Kalamazoo, Mich.	3	2		
Kansas City, Kans.			6	
Kansas City, Mo.			17	
Kearny, N. J.	2			
Lackawanna, N. Y.	4	2		
Lakewood, Ohio.	1	1		
Lawrence, Kans.	1	1		
Lawrence, Mass.	3			
Leominster, Mass.	1			
Little Rock, Ark.	5			
Lockport, N. Y.	1			
Long Branch, N. J.	1			
Los Angeles, Calif.	5	4	5	
Louisville, Ky.	2	24		
Lowell, Mass.	2	3		
Lynn, Mass.	5	1		
Manchester, N. H.	1	1		
Manitowoc, Wis.	1	1		
Marquette, Mich.	3	2		
Methuen, Mass.	2			
Morristown, N. J.	1		1	
Mount Vernon, N. Y.	2	2		
Newark, N. J.	53	10		
New Britain, Conn.	1	1		
Newburgh, N. Y.	1	1		
Newburyport, Mass.	1	1		
Newton, Mass.	4	1		
New York, N. Y.		201	329	3
Oakland, Calif.	2	2		

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ass.	5	3	.....	.....
Ohio	4	4	.....	.....

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for March, 1919.

Place.	New cases reported.	Place.	New cases reported.
s:		Oklahoma:	
ounty—		Dewey County	1
n	1	Le Flore County	1
County—		Pottawatomie County	1
d (town)	1	Total	3
al	2		

City Reports for Week Ended Mar. 29, 1919.

lace.	Cases.	Deaths.	Place.	Cases.	Deaths.
	1		Memphis, Tenn	1	
	1		New York, N. Y	2	1
	1		Terre Haute, Ind		1
	1		Toledo, Ohio		1

RABIES IN ANIMALS.

City Reports for Week Ended Mar. 29, 1919.

Place.	Cases.	Place.	Cases.
N. J	1	Macon, Ga	1
Mo	2	Rochester, N. Y	1

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Massachusetts Report for March, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Massachusetts:						
Middlesex County—						
Everett	1				1	
Suffolk County—						
Boston	6				5	
Total	7				6	

Oklahoma Report for March, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Oklahoma:			Oklahoma—Continued.		
Atoka County	11		Kay County	50	
Beaver County	1		Kingfisher County	2	
Bryan County	13		Lincoln County	2	
Blaine County	4		La Flore County	11	
Cimarron County	1		McIntosh County	1	
Comanche County	1		McCurtain County	19	
Cleveland County	7		Major County	3	
Creek County	32		Marshall County	7	
Canadian County	1		Noble County	36	
Custer County	1		Sequoyah County	2	
Garfield County	7		Stephens County	5	
Garvin County	3		Tulsa County	28	
Harper County	5		Woods County	3	
Haskell County	5		Total	281	
Jackson County	20				

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SMALLPOX—Continued.

City Reports for Week Ended Mar. 29, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Abilene, Tex.	1		Logansport, Ind.	1	
Akron, Ohio.	3		Long Beach, Calif.	2	
Alliance, Ohio.	1		Los Angeles, Calif.	4	
Ann Arbor, Mich.	1		Ludington, Mich.	1	
Atlanta, Ga.	43		Macon, Ga.	2	
Baltimore, Md.	2		Madison, Wis.	2	
Bangor, Me.	1		Marinette, Wis.	1	
Bedford, Ind.	2		Marshalltown, Iowa.	4	
Beloit, Wis.	2		Memphis, Tenn.	3	
Birmingham, Ala.	4		Milwaukee, Wis.	6	
Boulder, Colo.	1		Minneapolis, Minn.	7	
Camden, N. J.	1		Mobile, Ala.	5	
Cape Girardeau, Mo.	3		Moline, Ill.	1	
Carbondale, Pa.	1		Muscatine, Iowa.	1	
Cedar Rapids, Iowa.	2		Muskogee, Okla.	3	
Chanute, Kans.	21		Nashville, Tenn.	2	
Charleston, W. Va.	2		New Orleans, La.	4	
Chicago, Ill.	6		Newport, Ky.	1	
Cincinnati, Ohio.	9		New York, N. Y.	2	
Cleveland, Ohio.	4		Norfolk, Va.	5	
Columbus, Ohio.	2		Oak Park, Ill.	1	
Council Bluffs, Iowa.	5		Ogden, Utah.	4	
Dallas, Tex.	9		Omaha, Nebr.	28	
Danville, Ill.	1		Oshkosh, Wis.	3	
Davenport, Iowa.	28		Palestine, Tex.	8	
Decatur, Ill.	1		Parkersburg, W. Va.	1	
Denver, Colo.	11		Pekin, Ill.	8	
Des Moines, Iowa.	3		Peoria, Ill.	8	
Detroit, Mich.	2		Piqua, Ohio.	2	
Duluth, Minn.	2		Pittsburgh, Pa.	1	
Durham, N. C.	3		Portland, Oreg.	20	
Eau Claire, Wis.	5		Pueblo, Colo.	1	
Elgin, Ill.	1		Roanoke, Va.	3	
Elyria, Ohio.	1		Rochester, N. Y.	1	
Eureka, Calif.	7		Rock Island, Ill.	1	
Fairmont, W. Va.	1		St. Joseph, Mo.	3	
Fort Wayne, Ind.	3		St. Louis, Mo.	5	
Fort Worth, Tex.	3		St. Paul, Minn.	8	
Galveston, Tex.	1		Salt Lake City, Utah.	3	
Grand Rapids, Mich.	2		San Diego, Calif.	1	
Great Falls, Mont.	1		San Francisco, Calif.	8	
Greeley, Colo.	2		Sioux City, Iowa.	1	
Greenville, S. C.	5		South Bend, Ind.	1	
Houston, Tex.	1		Springfield, Ill.	1	
Independence, Mo.	4		Steubenville, Ohio.	3	
Joplin, Mo.	2		Superior, Wis.	3	
Kalamazoo, Mich.	8		Toledo, Ohio.	4	
Kansas City, Mo.	7		Tuscaloosa, Ala.	1	
Knoxville, Tenn.	3		Washington, D. C.	5	1
Kokomo, Ind.	1		Wichita, Kans.	23	
Lexington, Ky.	5		Winston-Salem, N. C.	12	
Lincoln, Nebr.	22		Youngstown, Ohio.	12	
Little Rock, Ark.	1		Zanesville, Ohio.	2	

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	1	Picric acid plant zone, Ga.	13
Gas and flame school zone, Ga. and Ala.	3	Camp Pike zone, Ark.	13
Camp Gordon zone, Ga.	17	Camp Polk zone, N. C.	10
Camp Jackson zone, S. C.	17	Camp Zachary Taylor zone, Ky. and Ind.	32
Camp Lee zone, Va.	4	Tidewater health district, Va.	3
Camp Merritt zone, N. J.	1	Camp Travis zone, Tex.	7
Muscle Shoals sanitary district, Ala.	8		

TETANUS.

City Reports for Week Ended Mar. 29, 1919.

During the week ended March 29, 1919, one death from tetanus was reported at each of the following cities: Lexington, Ky., Morristown, N. J., New Orleans, La., and New York, N. Y.

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TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Cases.
Camp Devens zone, Mass.	1	Camp Polk zone, N. C.	2
Gas and flame school zone, Ga. and Ala.	3	Portsmouth and Norfolk County health district, Va.	1
Camp Gordon zone, Ga.	6	Camp Sherman zone, Ohio	1
Gulfport health district, Miss.	2	Camp Zachary Taylor zone, Ky. and Ind.	5
Camp Lee zone, Va.	3	Tidewater health district, Va.	6
Camp Merritt zone, N. J.	1	Camp Travis zone, Tex.	5
Picric acid plant zone, Ga.	1	Wilmington sanitary district, N. C.	5
Camp Pike zone, Ark.	4		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 811.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 12, 1919.

	Cases.		Cases.
Camp A. A. Humphreys zone, Va.	2	Muscle Shoals sanitary district, Ala.	1
Camp Jackson zone, S. C.	1	Camp Zachary Taylor zone, Ky. and Ind.	1
Camp Lee zone, Va.	1	Wilmington sanitary district, N. C.	2

State Reports for March, 1919.

Place.	New cases reported.	Place.	New cases reported.
Massachusetts:		**Massachusetts—Continued.**	
Berkshire County—		Suffolk County—	
Pittsfield	2	Boston	7
Bristol County—		Chelsea	1
Fall River	1	Revere	1
New Bedford	2	Worcester County—	
Essex County—		Dudley (town)	2
Beverly	1	Leominster	1
Haverhill	1		
Lawrence	8	Total	44
Lynn	1		
Rockport (town)	3	**Oklahoma:**	
Hampshire County—		Comanche County	2
Northampton	1	Creek County	15
Middlesex County—		Canadian County	1
Cambridge	1	Delaware County	1
Everett	2	Dewey County	2
Lowell	1	Haskell County	1
Newton	1	Lincoln County	1
Somerville	1	Le Flore County	15
Wayland (town)	1	Murray County	2
Norfolk County		Noble County	2
Brookline (town)	1	Pottawatomie County	5
Medfield (town)	1	Pittsburg County	2
Quincy	1	Sequoyah County	5
Weymouth (town)	2	Tillman County	3
		Total	38

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TYPHOID FEVER—Continued.

City Reports for Week Ended Mar. 29, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Allentown, Pa.	10		Kenosha, Wis.	1	
Baltimore, Md.	4	2	Little Rock, Ark.	1	1
Baton Rouge, La.	1		Los Angeles, Calif.	3	
Bedford, Ind.		1	Louisville, Ky.	1	
Berkeley, Calif.	1		Meadville, Pa.	1	
Boston, Mass.	3		Memphis, Tenn.	138	12
Bridgeport, Conn.	1		Milwaukee, Wis.	1	
Brookline, Mass.	1		New York, N. Y.	2	2
Buffalo, N. Y.		1	Omaha, Nebr.	1	
Charleston, S. C.	1		Paterson, N. J.	1	1
Chicago, Ill.	3		Pawtucket, R. I.	1	
Dayton, Ohio.	1		Philadelphia, Pa.	7	
Decatur, Ill.	1		Pittsburgh, Pa.	1	
East Chicago, Ind.		2	Providence, R. I.	1	
East Liverpool, Ohio.		1	Riverside, Calif.	1	
Fort Worth, Tex.	1		Saginaw, Mich.	1	
Galveston, Tex.	2		St. Louis, Mo.	2	
Geneva, N. Y.	1		St. Paul, Minn.		1
Grand Rapids, Mich.		2	San Francisco, Calif.	3	
Haverhill, Mass.	1		Somerville, Mass.	1	
Houston, Tex.	4		Stockton, Calif.	1	
Independence, Mo.		1	Washington, D. C.	2	
Indianapolis, Ind.	2		Wheeling, W. Va.	1	
Kansas City, Mo.	1	3	Wilkinsburg, Pa.	1	

TYPHUS FEVER.

Artesia, Tex., and New York, N. Y.

During the week ended March 29, 1919, one case of typhus fever was reported in New York, N. Y. On April 6 one case of this disease was reported at Artesia, La Salle County, Tex.

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for March, 1919.

During March there were reported in Massachusetts 659 cases of diphtheria, 778 cases of measles, and 719 cases of scarlet fever; in Oklahoma, 34 cases of diphtheria, 68 cases of measles, and 87 cases of scarlet fever.

City Reports for Week Ended Mar. 29, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams, Mass.	14,406	4							1	
Akron, Ohio.	91,604	82	2		56		2		4	
Alameda, Calif.	28,433	7			1				2	1
Albany, N. Y.	106,632		1		26		2		15	
Allentown, Pa.	65,109		5		24		1		1	
Alliance, Ohio.	19,581	7	1							
Alton, Ill.	23,781	14								1
Altoona, Pa.	59,712		9				1			
Anderson, Ind.	24,240	12								
Ann Arbor, Mich.	15,041	14	3				2		1	1
Anniston, Ala.	14,326				2				2	
Ansonia, Conn.	16,954	6								1

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Bedford, Ind	10,613	3					2			
Bellaire, Ohio	14,575	10								
Belleville, Ill	31,154						1			
Beloit, Wis	18,547	3	2		1					
Benton Harbor, Mich	11,099	3								
Berkeley, Calif	60,427	7	1							1
Berlin, N. H	13,892	7								
Beverly, Mass	22,128	4	1							
Biddeford, Me	17,760	10								1
Billings, Mont	15,123				1		10			
Binghamton, N. Y	54,861	33								1
Birmingham, Ala	189,716	43			4	1				8
Bloomington, Ind	11,661	4	1							
Boise, Idaho	35,951	2					1			
Boston, Mass	767,813	239	38	6	17		66	1	47	
Boulder, Colo	12,012						1			
Braddock, Pa	22,060		5				2			
Brazil, Ind	10,472	3								
Bridgeport, Conn	124,724	57	8	2	3		2		6	
Bristol, Conn	16,318	5	2						1	
Brockton, Mass	69,152	13	1				1		1	
Brookline, Mass	33,526	13			1		1		2	
Brunswick, Ga	10,984	1			22				1	
Buffalo, N. Y	475,781	154	44	3	74	2	21		26	
Burlington, Iowa	25,144	9					1			
Burlington, Vt	21,802	15			24	1				
Butler, Pa	28,677						1			
Cadillac, Mich	10,158	3	2							
Cairo, Ill	15,995	11	1							
Cambridge, Mass	114,293	21	4		10		1		2	
Camden, N. J	108,117		2		3		1		4	
Canton, Ohio	62,566	24			17		4		2	
Cape Girardeau, Mo	11,146									
Carbondale, Pa	19,597		2				1			
Carnegie, Pa	11,963						1			
Chambersburg, Pa	12,475		1							
Champaign, Ill	15,052	2		1						
Chanute, Kans	12,968	3							1	
Charleston, S. C	61,041	23								
Charleston, W. Va	31,060	6	1		1					
Charlotte, N. C	40,759	22			10	1	1		1	
Chelsea, Mass	48,405	15					4			
Chester, Pa	41,857						2		2	
Cheyenne, Wyo	[1] 11,320				5					
Chicago, Ill	2,547,201	733	95	14	482	3	64	2	271	
Chicopee, Mass	29,950	7					1		4	
Chillicothe, Ohio	15,625	2					1			
Cincinnati, Ohio	414,248	178	4		22		33		21	
Clarksburg, W. Va	12,960		3				1			
Cleveland, Ohio	692,259	265	16	1	28	1	7		29	
Clinton, Iowa	27,678		1				1			
Clinton, Mass	[1] 13,075	2							1	
Coatesville, Pa	14,998				66		1			
Coffeyville, Kans	18,331				10				1	
Cohoes, N. Y	25,292	8					3			

[1] Population Apr. 15, 1910.

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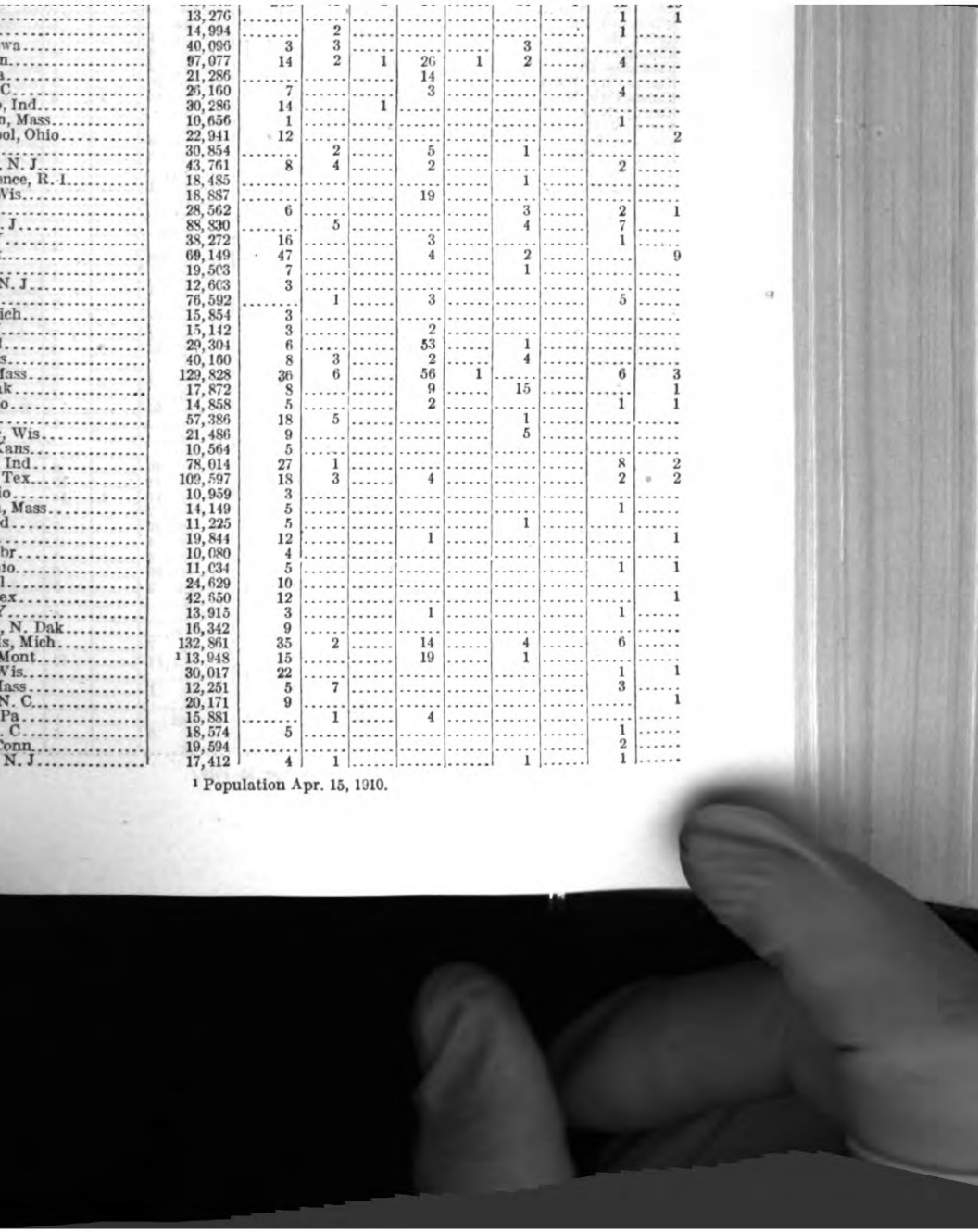
	13,276								1	1
	14,994		2						1	
wa	40,096	3	3				3			
n	97,077	14	2	1	26	1	2		4	
a	21,286				14					
C	26,160	7			3				4	
, Ind	30,286	14		1						
n, Mass	10,656	1							1	
ol, Ohio	22,941	12								2
	30,854		2		5		1			
N. J	43,761	8	4		2				2	
nce, R. I	18,485						1			
Vis	18,887				19					
	28,562	6					3		2	1
J	88,330		5				4		7	
	38,272	16			3				1	
	69,149	47			4		2			9
	19,503	7					1			
N. J	12,603	3								
	76,592		1		3				5	
ich	15,854	3								
	15,142	3			2					
	29,304	6			53		1			
s	40,160	8	3		2		4			
lass	129,828	36	6		56	1			6	3
k	17,872	8			9		15			1
o	14,858	5			2				1	1
	57,386	18	5				1			
, Wis	21,486	9					5			
ans	10,564	5								
Ind	78,014	27	1						8	2
Tex	109,597	18	3		4				2	2
io	10,959	3								
, Mass	14,149	5							1	
d	11,225	5					1			
	19,844	12			1					1
br	10,080	4								
io	11,034	5							1	1
l	24,629	10								
ex	42,650	12								1
	13,915	3			1				1	
N. Dak	16,342	9								
s, Mich	132,861	35	2		14		4		6	
Mont	[1] 13,948	15			19		1			
Vis	30,017	22							1	1
lass	12,251	5	7						3	
N. C	20,171	9								1
Pa	15,881		1		4					
C	18,574	5							1	
Conn	19,594								2	
N. J	17,412	4	1				1		1	

[1] Population Apr. 15, 1910.



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Jersey City, N. J.	312,557			29		41		7		
Johnstown, N. Y.	10,678	2								
Johnstown, Pa.	70,473			2				1		
Joplin, Mo.	33,400	8				1				
Kalamazoo, Mich.	50,408	27		1		4		4		
Kankakee, Ill.	14,270					2		1		
Kansas City, Kans.	102,096			3		10		3		
Kansas City, Mo.	305,816	115		3		45	2	5		
Kearny, N. J.	24,325	1								
Keene, N. H.	10,725	1								
Kenosha, Wis.	32,833	5		1		79		8		
Knoxville, Tenn.	59,112			1		8		1		
Kokomo, Ind.	21,929	19						4		
Lackawanna, N. Y.	16,219	6		1		1				
La Crosse, Wis.	31,833	13		2						
La Fayette, Ind.	21,481	10		1						
Lakewood, Ohio	23,813	12						1		
Lancaster, Ohio.	16,086	6						2		
Lancaster, Pa.	51,437			2		120				
Laurel, Miss.	12,313			1				1		
Lawrence, Kans.	13,477	3				1				
Lawrence, Mass.	102,923	22		4				2		
Lebanon, Pa.	20,947					74				
Leominster, Mass.	21,365	4		1		1		1		
Lexington, Ky.	41,997	18				15		2		
Lima, Ohio	37,145	15						8		
Lincoln, Nebr.	46,957	14		1		2		8		
Little Rock, Ark.	58,716	9						7		
Lockport, N. Y.	20,028	4				50				
Logansport, Ind.	21,338	15						1		
Long Beach, Cal.	29,163	10								
Long Branch, N. J.	15,733	2								
Lorain, Ohio	38,266	13		1		26		6		
Los Angeles, Calif.	535,485	160		19		13		13	2	
Louisville, Ky.	240,808	125		8		11	1	14		
Lowell, Mass.	114,366	37		16		7		4		
Lynn, Mass.	104,534	27		6		19		7		
McKeesport, Pa.	48,299					4		1		
Macon, Ga.	46,009	17				4		1		
Madison, Wis.	31,315	7		1		16		6		
Malden, Mass.	52,243	11		1		2		3		
Manchester, Conn.	15,859	1								
Manchester, N. H.	79,607	22						5		
Manitowoc, Wis.	13,031	7						4		
Marinette, Wis.	[1] 14,610	3				7		2	1	
Marion, Ind.	19,923	6				1		12		
Marion, Ohio.	24,129			1						
Marlboro, Mass.	15,285	2				1				
Marquette, Mich.	12,555	7								
Marshalltown, Iowa.	14,519			1				1		
Martinsburg, W. Va.	12,984					5		5		
Mason City, Iowa.	14,938	4								

[1] Population Apr. 15, 1910.

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Sacramento, Calif	68,984							
Saginaw, Mich	56,469	18	2				3	
St. Cloud, Minn	12,013						2	
St. Joseph, Mo	86,498	39	3	2			5	
St. Louis, Mo	768,630	252	41	1	30		25	1
St. Paul, Minn	252,465	76	17	2	36	1	21	2
Salem, Mass	49,346	23	1				15	
Salt Lake City, Utah	121,623	30	3		1		2	
San Bernardino, Calif	17,616	5						
San Diego, Calif	56,412	27	1				2	
Sandusky, Ohio	20,226	4						
Sanford, Me	11,217	5						
San Francisco, Calif	471,023	142	18	3	5		9	
Santa Cruz, Calif	15,150	2						
Saratoga Springs, N. Y	13,839	5						
Saugus, Mass	10,210	2	5	1			5	
Sault Ste. Marie, Mich	14,130	5						
Schenectady, N. Y	103,774	23						
Scranton, Pa	149,541		3				3	
Sharon, Pa	19,156		1				1	
Shenandoah, Pa	29,753		3		3		1	
Sioux City, Iowa	58,588		1				2	
Somerville, Mass	88,618	22	9		2		6	
South Bend, Ind	70,967	21			49	1		
Southbridge, Mass	14,465	4	1					
Spartanburg, S. C	21,685	6			4			
Springfield, Ill	62,623	22	1					
Springfield, Mass	108,668	45	8	3			4	1
Springfield, Mo	41,169	11						
Springfield, Ohio	52,296	17			17			
Steelton, Pa	15,759				3			
Steubenville, Ohio	28,259	14						
Stockton, Calif	36,209	14	2	1				
Streator, Ill	14,313	6						
Superior, Wis	47,167	13					5	
Syracuse, N. Y	158,559	40	6		1		7	1
Taunton, Mass	36,610	16			1			
Terre Haute, Ind	67,361	23			1		2	
Tiffin, Ohio	12,962	6						
Toledo, Ohio	202,010	101	5		8		15	2
Topeka, Kans	49,538	20	1				3	
Trenton, N. J	113,974	38	4		12	1		
Troy, N. Y	78,094	41	6		8		4	
Tuscaloosa, Ala	10,824		2		2			
Vallejo, Calif	13,803	1	1					
Waltham, Mass	31,011	7	4	1			5	
Warren, Pa	15,083						1	

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, Pa	34,123		5				1			
Del	95,369	29			1		1			4
N. C	30,400	8			1		2		2	
Mass	10,812	3					1			
n	[1] 18,583	7								1
m, N. C	33,136	12			29	1			5	2
ass	13,105						2			
s	16,076	6								1
ass	166,106	67	5		42	1	6		4	7
Y	103,066	18	4		1		2			1
Ohio	112,282	49	3		67	1	4			
hio	31,320	12			13					1

[1] Population Apr. 15, 1910.

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FOREIGN.

CHINA.

Recurrence of Influenza—Hankow.

Recurrence of influenza, occurring chiefly among children and a few foreign adults, was reported at Hankow, China, February 26, 1919. The type of the disease was stated to be mild with no pneumonia.

Influenza—Wuchang.

Influenza was reported, February 26, 1919, to be very prevalent in Chinese military camps at Wuchang.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana, as follows:

Disease.	Mar. 11-20, 1919.		Remaining under treatment Mar. 20, 1919.
	New cases.	Deaths.	
Broncho-pneumonia	8		[1] 16
Diphtheria	2		3
Grippe	88	5	[2] 60
Leprosy			17
Malaria	3		[3] 15
Scarlet fever	1		2
Typhoid fever	21	1	[3] 46
Varicella	1		2

[1] Exclusive of those remaining in hospitals. [2] From the interior, 12. [3] From the interior, 22.

RUSSIA.

Influenza—Archangel Government—December, 1918.[1]

During the period from December 2 to 15, 1918, 2,240 new cases of influenza were notified in the Archangel government, Russia, the cases occurring in the Archangel district and in two adjoining districts. During the period from December 16 to 31, 1918, influenza was reported present in Archangel district and vicinity, but no new cases were notified.

[1] Public Health Reports, Feb. 28, 1919, p. 421.

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SERBIA.

Typhus Fever.

Typhus fever was reported April 5, 1919, to be spreading in Serbia.

UKRAINE.

Typhus Fever.

Typhus fever was reported, April 5, 1919, to be spreading in the Ukraine.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended Apr. 18, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Feb. 2-15	2,493	2,135	
Indo-China:				
Cochin-China—				
Saigon	Feb. 17-23	26	18	
Java:				
East Java				Jan. 15-28, 1919: Cases, 219; deaths, 124.
Surabaya	Jan. 15-28	117	71	
Philippine Islands:				
Provinces				Feb. 23-Mar. 1, 1919: Cases, 85; deaths, 52.
Iloilo	Feb. 23-Mar. 1	22	13	
Laguna	do	19	13	
Misamis	do	24	10	
Occidental Negros	do	1	1	
Pampanga	do	2	3	
Pangasinan	do	17	12	
Poland:				
Plonsk district	Oct. 2-Nov. 27	5		
Warsaw	Oct. 6-26	3	1	
Russia:				
Petrograd	Oct. 1	279		In municipal hospitals.

PLAGUE.

India				Feb. 2-15, 1919: Cases, 6,979; deaths, 5,471.
Bombay	Feb. 2-8	1	1	
Karachi	Feb. 16-22	1	1	
Rangoon	Feb. 9-15	18	16	
Indo-China:				
Cochin-China—				
Saigon	Feb. 17-23	1	1	
Siam:				
Bangkok	Jan. 19-25	1		

SMALLPOX.

China:				
Amoy	Feb. 18-24			Present.
Antung	Feb. 24-Mar. 2	1		
Chungking	Feb. 9-15			Do.
Hongkong	Feb. 16-22	4		
Nanking	Feb. 23-Mar. 1			Do.
Tsingtau	Mar. 3-9	1		
Canada:				
Nova Scotia—				
Halifax	Mar. 20-29	20		
Sydney	Mar. 23-29	7		
Ontario—				
Toronto	Mar. 16-22	1		

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Apr. 18, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany				Nov. 24–Dec. 7, 1918: Cases, 94.
Dresden	Nov. 24–Dec. 7	18		
Halle	do	4		
Friedland	do	1		
Konigsberg	do	8		In persons evacuated from the Ukraine.
Schkeuditz	do	1		
Tilsit	do	1		
Torgau	do	1		
Great Britain:				
Liverpool	Mar. 2–15	2		
London	Mar. 9–15	5	1	
India:				
Bombay	Feb. 2–15	51	18	
Karachi	Feb. 9–22	21	8	
Rangoon	Feb. 9–15	81	30	
Indo-China:				
Saigon	Feb. 17–23	28	6	
Japan:				
Kobe	Mar. 2–15	136	40	
Java:				
East Java				Jan. 15–21, 1919: Cases, 2 deaths, 2.
Surabaya	Jan. 15–21	2	2	
Lithuania				Sept. 1–Oct. 16, 1918: Cases, 44.
Manchuria:				
Dairen	Feb. 22–Mar. 7	2	2	
Newfoundland:				
St. Johns	Mar. 22–28	5		
Brigus Junction	do	2		
St. Georges	do	6		Other outports, 9 cases.
Philippine Islands:				
Manila	Feb. 16–Mar. 1	5	2	Varioloid, 2.
Siberia:				
Vladivostok	Feb. 1–28	9	1	
Spain:				
Barcelona	Feb. 19–Mar. 11	2		
Balboa	Feb. 2–20	5		
Valencia	Feb. 16–22	44	6	
Straits Settlements:				
Singapore	Feb. 2–22	3		

TYPHUS FEVER.

Austria-Hungary:				
Hungary				Sept. 9–Nov. 3, 1918: Cases, 94; deaths, 8.
Budapest	Sept. 9–Nov. 3	59	2	
Pressburg	do	11	1	
Brazil:				
Rio de Janeiro	Jan. 26–Feb. 15	3		
China:				
Antung	Feb. 24–Mar. 2	1		
Egypt:				
Alexandria	Feb. 26–Mar. 2	50	10	
Germany				Oct. 20–Nov. 7, 1918: Cases, 12; deaths, 1.
Dresden	Oct. 20–Nov. 7	1		
Greifswald	do	1		
Godullahutte	do	1		
Cumbinnen district	do	1		
Konigshutte	do	1	1	
Magdeburg	do	2		
Oppeln district	do	5		
Great Britain:				
Cork	Feb. 2–22	4		
Glasgow	Mar. 9–15	1		
Japan:				
Nagasaki	Feb. 24–Mar. 16	11		
Lithuania				Sept. 1–Oct. 26, 1918: Cases, 539; deaths, 28.
Mexico:				
Aguascallentes	Mar. 24–30		1	
Netherlands:				
Rotterdam	Feb. 16–Mar. 1	190	47	
Poland				Sept. 29–Oct. 26, 1918: Cases, 572; deaths, 50.
Lodz	Sept. 29–Oct. 26	55	8	
Warsaw	do	111	13	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended Apr. 18, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Archangel	Jan. 15–Feb. 1	35	10	
Serbia				Apr. 5, 1919: Reported to be spreading.
Siberia:				
Vladivostok	Feb. 1–28	67	8	
Ukraine				Apr. 5, 1919: Reported to be spreading.

Reports Received from Dec. 28, 1918, to Apr. 11, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17–30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13–19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18–Dec. 28	1,351	1,031	
Do	Dec. 29–Feb. 1	6,971	6,229	
Calcutta	Sept. 20–Dec. 21		241	Report for Nov. 23, 1918, missing.
Do	Dec. 29–Feb. 8		720	
Karachi	Jan. 26–Feb. 8	2	2	
Madras	Oct. 5–Dec. 28	264	164	Oct. 27–Nov. 2, 1918: Cases, 9; deaths, 4.
Do	Jan. 5–Feb. 15	400	282	
Rangoon	Oct. 5–Dec. 21	35	33	
Do	Dec. 29–Feb. 8	14	11	
Indo-China				July 1–Aug. 31, 1918: Cases, 670; deaths, 412.
Anam	July 1–Aug. 31	37	30	
Cambodia	do	322	169	
Cochin-China	do	357	279	
Saigon	Oct. 7–Dec. 22	75	45	
Do	Dec. 3–Feb. 2	180	114	
Kwang-Chow-Wan	July 1–31	50	34	
Tonkin	July 1–Aug. 31	4		
Java:				
East Java				Oct. 7–Dec. 31, 1918: Cases, 381; deaths, 323. Jan. 1–14, 1919: Cases, 81; deaths, 52.
Surabaya district	Oct. 7–Dec. 31	655	423	
Do	Jan. 1–14	16	13	
Mid-Java				Sept. 26–Dec. 18, 1919: Cases, 3,282; deaths, 2,014.
Samarang	Sept. 26–Oct. 16	120	111	
West Java				Oct. 3–Dec. 11, 1918: Cases, 412; deaths, 238. Dec. 27, 1918–Jan. 23, 1919: Cases, 10; deaths, 3.
Batavia	Oct. 3–Dec. 11	291	148	
Do	Dec. 27–Jan. 23	8	2	
Cheribon	Jan. 3–9	1		
Mesopotamia:				
Bagdad	Oct. 11–18	8		
Philippine Islands:				
Manila	Sept. 22–Dec. 28	181	121	
Do	Dec. 29–Feb. 8	19	9	
Provinces				Nov. 2–9, 1918: Cases, 511; deaths, 417. Nov. 17–Dec. 28, 1918: Cases, 1,203; deaths, 858. Dec. 29, 1918–Feb. 15, 1919: Cases, 814; deaths, 583.
Albay	Dec. 15–21	1	1	
Bataan	Nov. 17–Dec. 28	38	32	
Do	Jan. 5–Feb. 8	3	3	
Batangas	Nov. 2–9	156	141	
Do	Nov. 17–Dec. 28	79	65	
Do	Dec. 29–Feb. 8	21	15	
Bohol	Nov. 2–9	19	17	
Do	Nov. 17–Dec. 21	12	5	
Do	Jan. 12–Feb. 8	48	34	
Bulacan	Oct. 27–Nov. 2	5	6	
Do	Nov. 17–Dec. 28	44	30	
Do	Dec. 29–Feb. 15	36	23	
Capiz	Dec. 22–28	7	5	
Do	Jan. 5–25	28	14	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 11, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Continued.				
Provinces—Continued				
Cavite	Oct. 27-Nov. 2	38	28	
Do	Nov. 17-Dec. 21	103	75	
Do	Dec. 29-Jan. 25	17	10	
Cebu	Dec. 15-21	41	20	
Do	Jan. 12-18	13	12	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 15	56	38	
Iloilo	Oct. 27-Nov. 2	9	6	
Do	Nov. 17-Dec. 21	70	51	
Do	Jan. 5-Feb. 15	127	82	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Feb. 15	67	51	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 24-30	4	5	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-15	74	45	
Nueva Ecija	Jan. 12-25	9	6	
Occidental Negros	Feb. 2-8	6	3	
Oriental Negros	Nov. 2-9	20	8	
Do	Nov. 17-Dec. 7	6	6	
Do	Jan. 5-Feb. 8	35	22	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Feb. 1	15	12	
Pangasinan	Nov. 2-9	234	192	
Do	Nov. 17-Dec. 28	428	313	
Do	Dec. 29-Feb. 15	134	100	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-Feb. 8	44	36	
Tayabas	Nov. 2-9	7	4	
Do	Nov. 17-Dec. 28	51	25	
Do	Dec. 29-Feb. 15	40	62	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-Feb. 8	25	21	
Poland:				
Warsaw	Sept. 29-Oct. 5	2		
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 5-Aug. 21, 1918: Cases 894; deaths 793.
Ukrania—				
Ekaterinaslav	Sept. 1-20	7	6	
Odessa	do	25		Sept. 1-20, 1918: 11 cases on s. s. Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
Do	Feb. 9-15	1	1	
China:				
Amoy	Nov. 24-Dec. 8			Present.
Chungking	Dec. 1-7			Do.
Hongkong	Oct. 1-Dec. 28	4	4	
Do	Jan. 1-31	5	4	
Ecuador:				
Duran	Feb. 16-28	1	1	
Guayaquil	July 1-Dec. 31	20	7	
Do	Jan. 1-Feb. 28	43	13	
Taura	Dec. 16-31	1	1	
Egypt				Jan. 1-Nov. 21, 1919: Cases, 287; deaths, 153. Jan. 1-Mar. 4, 1919: Cases, 134; deaths, 120.

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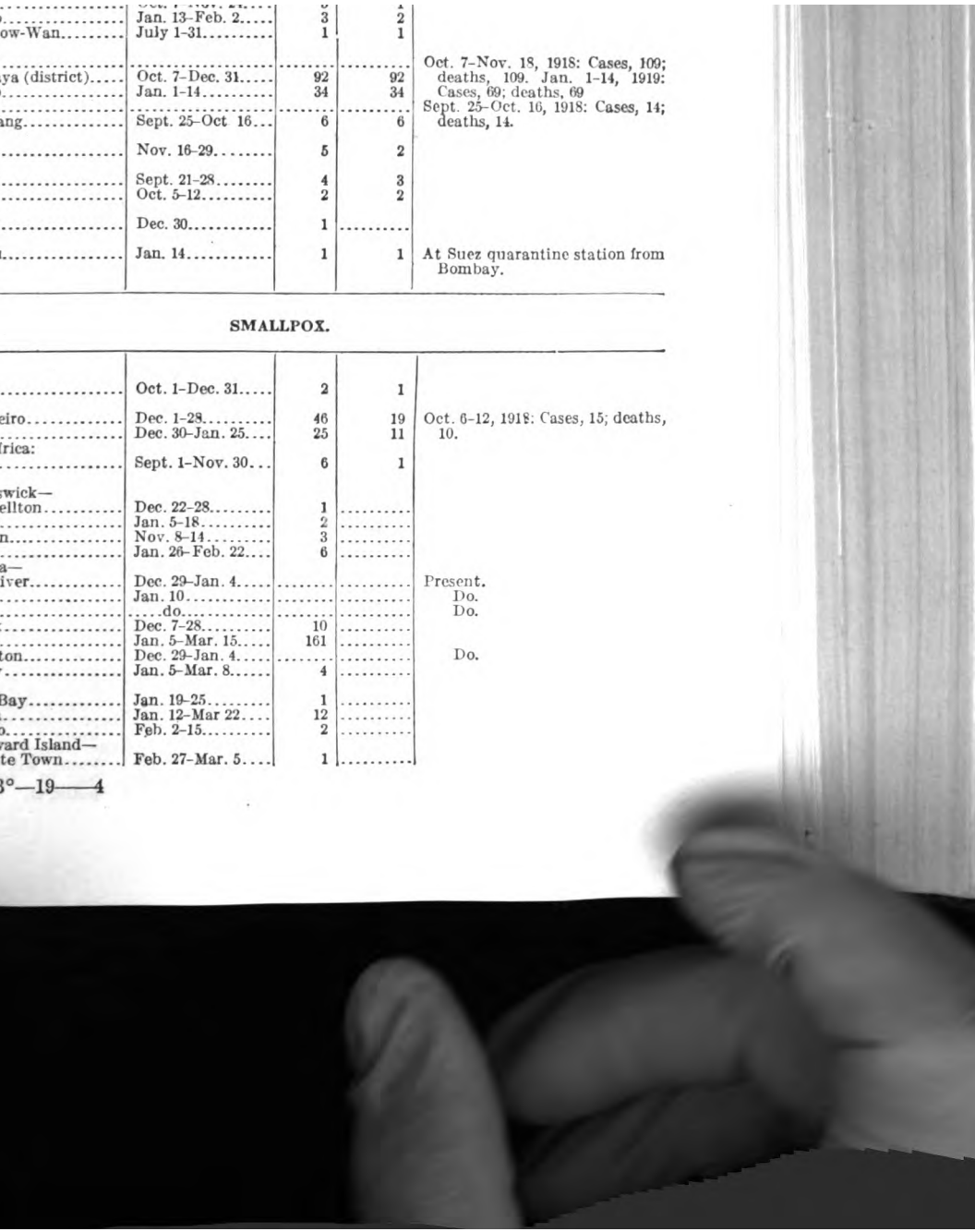
	Jan. 13–Feb. 2	3	2	
ow-Wan	July 1–31	1	1	
ya (district)	Oct. 7–Dec. 31	92	92	Oct. 7–Nov. 18, 1918: Cases, 109; deaths, 109. Jan. 1–14, 1919: Cases, 69; deaths, 69
	Jan. 1–14	34	34	
ng	Sept. 25–Oct 16	6	6	Sept. 25–Oct. 16, 1918: Cases, 14; deaths, 14.
	Nov. 16–29	5	2	
	Sept. 21–28	4	3	
	Oct. 5–12	2	2	
	Dec. 30	1		
	Jan. 14	1	1	At Suez quarantine station from Bombay.

SMALLPOX.

	Oct. 1–Dec. 31	2	1	
eiro	Dec. 1–28	46	19	Oct. 6–12, 1918: Cases, 15; deaths, 10.
	Dec. 30–Jan. 25	25	11	
rica:				
	Sept. 1–Nov. 30	6	1	
wick—				
ellton	Dec. 22–28	1		
	Jan. 5–18	2		
n	Nov. 8–14	3		
	Jan. 26–Feb. 22	6		
a—				
iver	Dec. 29–Jan. 4			Present.
	Jan. 10			Do.
	do			Do.
	Dec. 7–28	10		
	Jan. 5–Mar. 15	161		
ton	Dec. 29–Jan. 4			Do.
	Jan. 5–Mar. 8	4		
Bay	Jan. 19–25	1		
	Jan. 12–Mar 22	12		
	Feb. 2–15	2		
ard Island—				
te Town	Feb. 27–Mar. 5	1		



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Nanking	Dec. 1–28			Do.
Do	Dec. 29–Feb. 22			Do.
Shanghai	Jan. 20–26	1		
Chosen (Korea):				
Chemulpo	Nov. 1–Dec. 31	15	4	
Do	Jan. 1–31	6	1	
Denmark:				
Copenhagen	Nov. 9–Dec. 28	12		
Do	Dec. 29–Jan. 19	15		
Egypt:				
Alexandria	Dec. 17–23	1	1	
Do	Jan. 22–Feb. 25	6	1	
France:				
Bordeaux	Feb. 8–13		1	
Great Britain:				
Liverpool	Jan. 26–Mar. 1	5		Of these, 2 from
Greece:				
Saloniki	Feb. 2–15		3	
India:				
Bombay	Aug. 18–Dec. 28	35	8	
Do	Dec. 29–Feb. 1	80	24	
Calcutta	Sept. 29–Dec. 28		17	Report for week
Do	Dec. 29–Feb. 8		80	1918, missing.
Karachi	Sept. 29–Dec. 28	13	4	
Do	Dec. 29–Feb. 8	34	8	
Madras	Oct. 5–Dec. 28	62	40	
Do	Dec. 29–Feb. 18	89	40	
Rangoon	Oct. 20–Dec. 21	32	6	
Do	Dec. 29–Feb. 8	228	72	
Indo-China:				
Anam	July 1–Aug. 31	87	51	
Cambodia	Aug. 1–31	78	40	July 1–31, 1918: C
Cochin-China	July 1–Aug. 31	335	87	104.
Saigon	Oct. 7–Dec. 22	20	5	
Do	Dec. 30–Feb. 2	8	3	
Tonkin	July 1–Aug. 31	11	1	
Italy:				
Genoa	Jan. 9–31	2	1	
Messina	Mar. 2–8	1		Cases reported i
Palermo	Jan. 31–Feb. 20	2		ties in Provinc
Japan:				
Kobe	Oct. 26–Dec. 28	186	46	
Do	Dec. 29–Mar. 1	384	97	
Taihoku	Jan. 15–Feb. 11	145	18	Island of Formo
Yokohama	Jan. 20–26	1		
Java:				
East Java				Oct. 7–Dec. 31,
Surabaya (district)	Oct. 7–Dec. 31	16		deaths, 1. Ja
Do	Jan. 1–7	1		Cases, 1; death
Mid-Java				Sept. 25–Dec. 18,
				deaths, 3.
West Java				Oct. 2–Dec. 11,
Batavia	Oct. 2–Dec. 11	185	151	deaths, 263.
Do	Dec. 27–Jan. 23	34	23	Jan. 23, 191
				deaths, 41.

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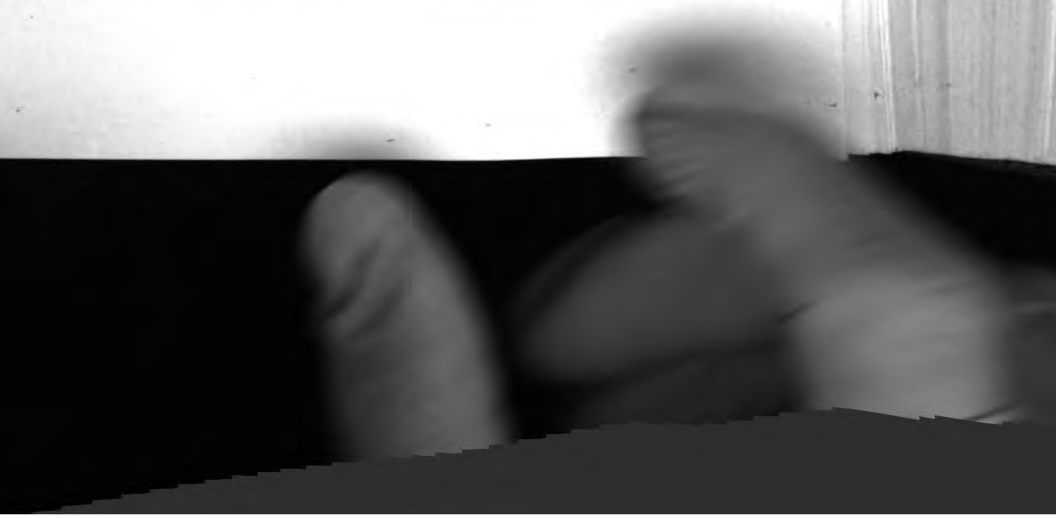
	Feb. 1–7	15		
	do			Present.
	Feb. 9–14	1		
	Feb. 1–7	40		Bay of Islands.
	Mar. 8–14	1		
	Dec. 7–13	4		
	Jan. 11–17	6		Feb. 7, 1919: Present.
	Dec. 7–13	60		Placentia Bay.
	Feb. 15–21	1		
	do	1		Harbor Grace.
	Feb. 15–Mar. 7	7		
	Feb. 1–Mar. 14	26		
	Jan. 18–24	2		
				Aug. 1–31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1–25, 1919: Cases, 28.
	Dec. 15–21	1		
	Dec. 29–Feb. 9	8		
	Nov. 2–9	4	3	
	Dec. 29–Feb. 15	12	2	Varioloid, 11.
	Nov. 16–Dec. 28	843		
				July 1–Oct. 31, 1918: 45 fatal cases.
	Nov. 1–3	4		
	Jan. 17–23		1	
	Jan. 9–Feb. 11		5	
	Jan. 1–31	1		
	Oct. 1–Dec. 31	18		
	Sept. 1–Oct. 31	153		
	Jan. 1–31		58	
	Nov. 1–Dec. 31		8	
	Jan. 1–31		3	
	Nov. 10–Dec. 21	40	9	
	Dec. 29–Jan. 25	93	10	
	Oct. 6–12	1		
	Feb. 2–8		1	
	Aug. 1–30	1		
	Aug. 1–Oct. 31	12		Nov. 1–30, 1918: Cases, 4.



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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 11, 1919—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers	Nov. 1-30	1		
Austria-Hungary:				
Hungary	Sept. 2-8	2		
Brazil:				
Ceara	Sept. 14-21	1		
Rio de Janeiro	Dec. 15-22	2		
Do	Dec. 29-Jan. 25	26	3	
São Paulo	Jan. 13-19	3		
Bulgaria:				
Acteven	Mar. 10			Present.
Rustchuk	do			Do.
China:				
Antung	Dec. 2-15	2		
Do	Jan. 6-12		1	
Chosen (Korea):				
Seoul	Jan. 1-31	2		
Colombia:				
Barranquilla	Nov. 8-Dec. 28		3	
Do	Jan. 5-Mar. 8	2	3	
Egypt:				
Alexandria	Oct. 14-Dec. 31	85	28	
Do	Jan. 1-Feb. 25	126	40	Confined to one quarter of city and mostly to natives.
Germany:				
Breslau	Sept. 29-Oct. 19	12	8	
Königsberg	do	3	1	
Mostelten	do	7	2	District of Allenstein.
Great Britain:				
Glasgow	Dec. 22-28	5		
Do	Jan. 5-Feb. 8	9	1	
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-Feb. 15		78	
Italy:				
Bari	Feb. 3-9	19		In soldiers returning from Black Sea.
Naples	do	8		
Taranto	do	2		Do.
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-Feb. 23	19	4	
Java:				
East Java				Oct. 7-21, 1918: Cases, 5.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 18, 1918: Cases, 6.
West Java				Oct. 2-23: Cases, 31; deaths, 6.
Batavia	Oct. 2-23	15	4	
Macedonia:				
Drama	Mar. 17			Present.
Kavala	do	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5-Dec. 27	2		
Do	Dec. 28-Jan. 10	3		
Mexico:				
Aguascalientes	Feb. 2-23		3	
Guadalajara	Nov. 1-Dec. 31	4	1	
Mexico City	Sept. 22-Dec. 28	434		
Do	Dec. 29-Mar. 8	209		
Netherlands:				
Amsterdam	Dec. 8-14	1		
Do	Jan. 12-18	4		
Delft	Feb. 26			Present.
Harlem	do			Do.
Leiden	do			Do.
Limburg	do	5	1	Mining district.
Rotterdam	Feb. 2-15	194	24	Jan. 30-Feb. 27, 1919: Cases, 666; deaths, 66.
Schiedam	Feb. 26			Present.
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 30	43		
Do	Jan. 17-30	6	1	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 11, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Pernambuco	Oct. 1-Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29-Feb. 4		4	
Ecuador:				
Balsahoyo	Nov. 1-30	1		
Catarama	Feb. 1-15	1		
Chobo	Jan. 1-15	1		
Daule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-Feb. 28	4	1	
Guayaquil	July 1, Dec. 31	326	177	
Do	Jan. 1-Feb. 28	114	59	
Hacienda Vainilla	Feb. 16-28	1		
Milagro	Nov. 1-15	1		
Do	Feb. 1-15	1		
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-Feb. 28	2	2	
Payo (Hacienda)	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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PUBLIC HEALTH REPORTS

VOL. 34 APRIL 25, 1919 No. 17

IS YOUR COMMUNITY FIT?

In order to acquaint municipal administrative officers and influential business men with the essential features of the modern public health movement, the Public Health Service has sent the following open letter, entitled "Is Your Community Fit?", to the mayors of all towns in the United States having a population of over 5,000. In addition to this, a copy has been sent to chambers of commerce and boards of trade and to all chapters of the American Red Cross. It is hoped that this will stimulate active interest in public health matters throughout the country, and that State and local health officers will help translate this program into effective action.

1. Who is responsible for the health of your city? Have you a health officer? Does he give all his time to his office? Or, are you depending upon a busy doctor who accepts this position at a nominal salary for the honor he feels attached to it? It is well to bear in mind the truth of the motto: Public health is purchasable; in a large measure a community can limit the degree of prevalence of disease within its borders.

2. Have you any definite information as to the prevalence of preventable diseases in your city? Without such information health officials can not direct their activities in a way that will yield the largest returns in disease prevention. All doctors must report such diseases as part of their responsibility to the community.

3. Have you a safe water supply? How do you know that it is safe? You can not know unless you have bacteriological tests made frequently and regularly. Typhoid fever, diarrhea, dysentery, and other water-borne diseases may be expected unless your water supply is kept safe. Do you permit a large proportion of your citizens to use water from wells which may be polluted? If your town is small and not provided with waterworks it is possible that insanitary privies and unsafe methods of disposal of human excreta are polluting your wells.

4. Is your town adequately sewered or are there still many homes with cesspools and insanitary privies? Are you and your neighbors doing anything to check the breeding of flies and the spread of fly-borne diseases? Does your community enforce any ordinance providing for the screening of food against flies in markets, restaurants, and food stores?

5. What effort has been made to ascertain whether or not your milk supply is safe? Diphtheria, scarlet fever, septic sore throat, typhoid fever, dysentery, all may be spread by unsafe milk. A system of inspection and efficient pasteurization will protect people from milk-borne diseases. If your community is too small to bear

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the expense of dairy inspection, it should at least enjoy an adequate system of pasteurization under proper supervision.

6. Do you know how many of the registrants from your community were rejected by the medical examining boards as unfit for military duty on account of tuberculosis? Has a campaign for the relief and prevention of tuberculosis been organized? If not, as a minimum requirement, provision should be made for the proper reporting of all cases of tuberculosis and for health instruction of families and patients, especially in families where there is a patient with advanced disease. Where the patient requires hospital care, is provision made for such care, either through city institutions or by arrangement for bed space in State or district tuberculosis hospitals? It is highly desirable to provide special clinics for the diagnosis and care of cases of tuberculosis before the disease has progressed too far.

7. A Nation-wide campaign for the prevention of venereal diseases has been organized. Have you consulted your health officer on the part your city should play in this important work? Is your community planning to take advantage of the recent Federal enactment and appropriation for the control of venereal diseases throughout the United States? Has an ordinance been passed which will enable your health department to take up this matter in an effective manner? Proper reporting of dangerous sources of infection and their adequate treatment and control beyond the contagious stages is essential. The establishment of places where infected persons can be given expert treatment and advice will greatly aid in limiting the spread of these diseases which are so disastrous to mankind.

8. Is malarial fever a health problem in your community? Has a survey been made by experts to advise as to proper methods for control? The Anopheles mosquito, carrier of this disease, may be breeding in collections of water which need draining, oiling, stocking with fish, or other measures for mosquito control. Control malaria in your community and you may find you have less labor shortage, the physical well-being of your people may show a marked improvement, and your community may enjoy a great economic uplift.

9. Is your town an industrial center? Are the workers properly housed and fed? Have the working conditions been investigated so as to reduce to a minimum the health hazards of the industries? The prosperity of your community depends largely on maintaining the maximum output of your industries, and this in turn depends largely on the health of the workers.

10. Are your schools provided with medical supervision to control the spread of communicable diseases among the children and to limit the number of sources of contagious diseases which often spread rapidly when carried to susceptible persons? Do your children have the advantage of regular physical examination by a physician? Is there a clinic for the treatment of all the physical defects discovered as a result of this examination? The after-war development of your community will depend largely on the physical fitness of your present school population.

11. Last, but not least, what is being done to protect the babies in your community? Have you a baby health station? Do you supervise the work of midwives? Do you make provision for expectant mothers in your community who are in need of advice and super-

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vision? Proper organization for prenatal care, with sufficient bed space in maternity wards, and a baby health station should be provided if the financial condition of your community is at all able to support such expense. If your community is small, at least one full-time public health nurse should be employed for the instruction of mothers in the care of themselves and their babies. You owe this to the mothers.

Why not take this whole matter up with the State health officer and the leading citizens of your community to see how the program here outlined can best be carried into effect?

Very truly,

RUPERT BLUE,
Surgeon General.

MEDICAL INSPECTION OF SCHOOL CHILDREN A PUBLIC HEALTH FUNCTION.

RECENT ACTION ON THE ENGLISH MINISTRY OF HEALTH BILL.

The following is a report of the action of the standing committee of the House of Commons on the ministry of health bill, taken from the London Lancet of March 22, 1919:

A standing committee of the House of Commons which is now considering the clauses of the ministry of health bill has adopted an important amendment without a division and in the face of protests from Dr. Addison and Mr. H. A. L. Fisher, the two cabinet ministers whose functions were immediately concerned. The amendment provides for the immediate transfer to the ministry of health of the functions of the board of education in regard to the medical inspection and treatment of children and young persons.

The bill, it will be remembered, proposes to combine under one State department the existing responsibilities of the local government board as far as health is concerned and all the functions of the insurance commissions for England and Wales, and also proposes to include the duties of the board of education in respect to the health of expectant and nursing mothers and children under school age. But with regard to the medical inspection of school children and young persons, a duty which now appertains to the board of education, it was understood that that board would not resign without real regret its responsibilities in this direction; and on the introduction of the bill it was stated that no such step would be found immediately necessary. Mr. G. Locker-Lampson, however, proposed an amendment in the sense indicated above, namely, to provide that all the powers and duties of the board of education with respect to the medical inspection and treatment of children and young persons should be transferred to the new ministry of health. From the debate which followed it is clear that the amendment was carried in deference to a practically unanimous feeling on the part of the committee in its favor.

The committee held the view that as the object of the bill was to take over the health services from the various departments of the State and thus to prevent overlapping, medical inspection and treatment of school children could not be left outside its scope. In

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MENTAL HYGIENE LEAFLET FOR TEACHER

Impressed by the important part which teachers can play in the development of mental hygiene, the Public Hea has prepared the following circular designed to give practance in this important field of public health. It is sugg State and local health officers, educational authorities, interested in promoting mental hygiene reprint this circ form of a leaflet and distribute it widely among school their respective communities.

SIGNIFICANCE OF SOME MENTAL TRAITS IN SCHOOL CH

The Teacher's Responsibility.

Because school constitutes so important a period in th ment of a child's personality and because the dominant sy a number of well-recognized types of mental disorders m sidered as perversions of certain traits of character com children, teachers should learn to recognize faulty traits of c developing children. For example, the prominent chara a certain type of insanity is an excessive activity, both ph mental, which is associated with lack of power for prolon concentration. In the depressive form of this same ment self-depreciation is exhibited in inordinate degree; and st type of insanity is characterized by seclusiveness, reticen contact with the present, and introspection, with satisfyi substituted for normal healthy interests.

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Furthermore, it is quite generally accepted that the imperfect mental adjustment exhibited by a number of individuals who are incapable of the highest citizenship, though not insane in the proper interpretation of the term, is largely due to the lack of proper mental training during childhood.

What Constitutes Personality.

The composite of all the traits of character exhibited by an individual constitutes personality, and this is determined not only by heredity but by the impress of all the extrinsic factors that influence physical and mental growth and development. The recognition of the influence of these factors furnishes the key to the preventive measures which constitute the modern program in mental hygiene. While all persons have the ability in greater or lesser degree, to recognize personality, only few persons are qualified by observation and experience to correctly interpret personality. For example, in the case of an intimate acquaintance it is often possible to foretell his or her mental reaction to new experiences. Personality, therefore, is largely habit of thought and conduct. Unfortunately, in the case of children, faulty habits of thought and conduct are not generally recognized by parents or teachers who may be expected to correct them.

Development of Personality.

The development of personality may be divided arbitrarily into several periods such as (1) prenatal, (2) birth and infancy, (3) preschool, (4) school or preadolescent, and (5) the period of adolescence.

Good and bad influences operating during the first two of these periods leave no conscious impress upon the individual, and during the third period the results are largely stored in subconscious memory. Sickness or injury to either the mother or the child during the first two periods may modify the mental development of the child and, operating during infancy, may likewise interfere with the normal mental attributes of after life.

The training given a child during infancy and the preschool age, his environment, his associations, his fears, his likes and dislikes, the amount of rest and play, and the occurrence of disease all enter into the development of his personality. Although these influences are probably beyond conscious recall, nevertheless they are reflected by his mental adjustments of later life.

School Life.

The future character of a child is beginning to manifest itself when he reaches school age, the so-called preadolescent stage of development. It is at this time that the opportunity of all others presents

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itself to the teacher not only to impart the principles of a sound education, but also to take an important part in the building of a sound character for future men and women. This is because faulty traits of personality which may be corrected in their incipiency, if neglected tend later in life to become crystallized into habit. In order to impart this training, however, the teacher should become familiar with the significance of certain childish tendencies and their rôle in the development of undesirable traits of character. It may be well, therefore, to describe a number of childish traits that are frequently observed and trace their molding into undesirable habits of thought and action through failure of educators properly to interpret their significance.

Fidgety children.—Teachers should ever bear in mind, that the impulsiveness and everchanging activity of a number of so-called fidgety children are but symptoms of mental fatigue. Normal children are active, impulsive, and inquisitive. This is nature's method of education, and children, therefore, should be allowed to exercise these mental traits. Rigid discipline tends to curb natural activities which then seek outlets in other more or less roundabout ways. For example, too rigid discipline tends to cause the harboring of resentment against and disregard for those in authority. When once discipline is relaxed, the child, having failed to learn to control his impulses, frequently finds himself in difficult and compromising situations.

Disciplinary measures should follow the form of substituting desirable activities for undesirable ones. To do this effectively, the teacher, besides having an understanding of personality, should be able, by the exercise of tact and judgment, to secure attention and discipline without apparent effort and without the knowledge of the child. This is especially important when the impulsiveness and activity of the child are so marked as to attract attention.

Children normally concentrate on the thing at hand, but under the artificial restraints of school life they may lose the ability and desire to do this, and become unstable in the direction of their activities. The evidence of fatigue must be watched for and prevented by assigning short tasks that should always be carried to completion and these followed by short periods of relaxation. The tasks should be gradually lengthened, commensurate with the development of the child and made more difficult; otherwise the changing activities symptomatic of fatigue will become crystallized into an unstable personality characterized by faulty thought and aimless purpose. In other words, the natural concentration exhibited by the child should be encouraged and his normal activities should be wisely directed toward useful ends.

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A child who has already developed a faulty habit in this respect should be trained so as to be less easily distracted and his natural ability to concentrate should be strengthened by directing his energies along productive lines. Failure to do this will allow the habit to become fixed because of the unconscious tendency of such a child to find an outlet for his excessive energy along the path of least resistance. This leads to an inability to adjust himself to the normal routine of life in later years.

Self-conceit.—The teacher will frequently encounter a child who at home exhibits a marked attachment for either his father or mother and as a result is seldom subjected to disciplinary measures. In school, children of this type often show a like fondness for the teacher or for older children and are made jealous by the attentions of their favorites to other children. In a number of instances such attachments are but a manifestation of the spirit of selfishness and self-aggrandizement. These children are frequently arrogant and cruel to their playmates and are disliked by them.

Teachers should exercise great care to prevent the development of unusual attachments by children at school and substitute for this tendency a desire for normal conduct in respect to their fellow pupils. They should carefully avoid making pets of them and endeavor to teach them to subordinate their own likes and dislikes in proper degree as relating to other children, and to realize that others are entitled to as much consideration as themselves. In the case of a number of such children, neglect of this precaution will result in abnormal mental reactions in later life which will be sources of much unhappiness, discouragement, and difficult adjustment to social and economic requirements.

Introspection and seclusiveness.—Children are naturally imaginative. The fancies of a child are many and varied and serve a proper rôle in the intellectual and emotional development. Unfortunately, the fancies may assume an improper trend fraught with serious consequences. This fact is brought out when it is recalled that children as a rule do not harbor resentment, but naturally attempt to settle their quarrels by argument. On the other hand, a number of children do harbor resentment when their power of self-assertion has been stunted through following the lines of least resistance in the settlement of childish disputes and discords instead of meeting them frankly and squarely. The children of this type are given to so-called day dreams and reflections over supposed wrongs. They weave fancies about supposititious injuries which give a species of satisfaction and contentment. These fancies, unless properly directed, ultimately become fixed habits of thought which make for poor mental adjustment in after life. For this reason, any system of training of children should take into consideration their imaginative faculties and the

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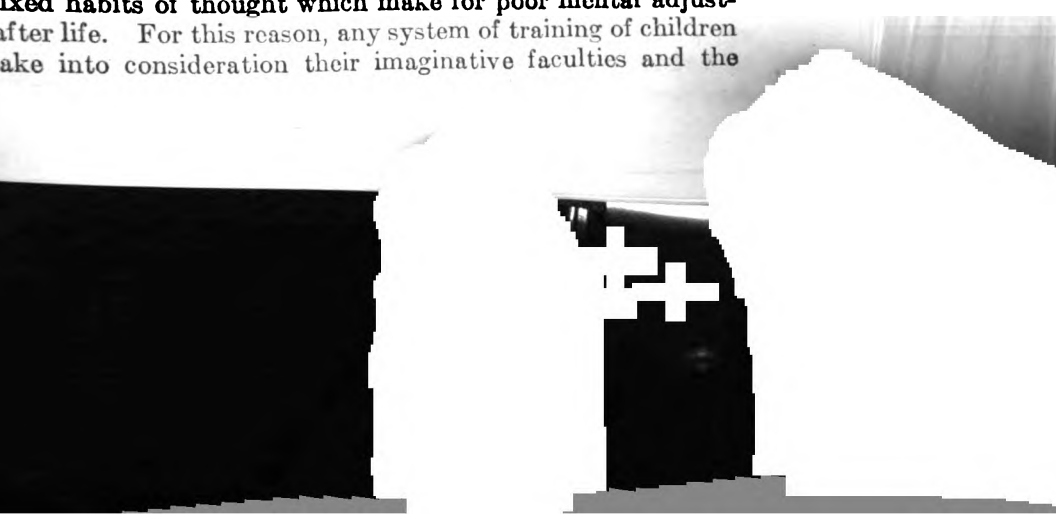

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afforded him to weave fancies about his insufferable lot. La
life the habit of introspection thus formed serves as a mental p

The wise teacher should note seclusiveness in children and th
dency of other children to leave them to this fate. If the
meaning of this is not understood, and if through sympath
makes the mistake of encouraging a child by adopting him, as it
as her protégé, the child soon looks upon the teacher as a subs
and clings to her as a protector and the tendency to indulge in
tions over his supposed wrongs is encouraged. Dependence i
respect will increase with advancing age until it becomes a fixed
of infantile tendencies.

The school régime, including play, should be so adjusted that
children will recognize the needs of these unfortunate ones an
courage them to take their place among them, thereby devel
the stunted social traits so that they may eventually exercise
sirable degree of self-assertion.

It will be observed that this article has been limited to the tra
personality which relate to the method of an individual's energy
put; his estimate of himself, and his ability to bring himself into
monious relation with the thought and pursuits of others.
traits will be considered in another article.

VICTORY IS WORTH THE PRICE.

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THE THICK BLOOD FILM METHOD FOR MALARIA DIAGNOSIS APPLICABLE TO PRESENT FIELD CONDITIONS.

By Bruce Mayne, Biologist, United States Public Health Service.

The method recommended in this paper is the result of about four years' personal experience with the thick-film method of malarial diagnosis. An attempt has been made to select the best features of methods previously employed in order to develop a technique more suitable for universal application and especially one which shall fit conditions in the usual field laboratories equipped with shifting personnel. The technique has been planned so as to render each step comparatively fool proof, and substitutes a cheaper and more reliable method of staining the malarial parasites for the one formerly employed.

No reference is given to the sources of our information and no claim is made as to the originality of the methods applied.

Preparing the blood smear.—Thick smears may be made in two ways:

1. Several drops of blood "puddled" with a circular movement of needle or corner of slide;
2. The drops of blood "dragged" sharply on the slide. This represents a thin smear thickened.

It has been found by counting five smears of each of the types, in scanning 480 fields, that the drag smear shows an average of 9.7 leucocytes, while there is an average of 11.5 in the puddle smear. The puddle smear, then, shows an average of 1.8 leucocytes per field in its favor.

Although the "drag" smear does not give the concentration of elements found with the "puddle," it has several advantages:

1. The cells and parasites are subject to less distortion, due to quicker drying of the blood;
2. A more uniform spread can be made with a drag smear than with the rotary smear of the other type;
3. The action of the acid alcohol in the process of dissolving the hemoglobin is more rapid;
4. This smear takes the stain more uniformly.

In a thick puddle smear it is found that parasites are less typical and artefacts are more numerous. It is also observed that slow drying of the blood in the thicker film causes shrinkage and distortion.

After the smear is made, the best results are obtained if the slide is left perfectly flat until the blood is dry, on account of the difficulty in clearing the clotted area which results if the slide is otherwise than level. The slide should not be exposed (if the smears are made in the open) to dust-laden winds, especially in country districts, because of the accumulation of spores of certain plants, which, when examined,

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from the ear, using a straight surgical needle with a sp
Gauze is used for cleaning the finger rather than cotton, as the n
from the latter are sometimes troublesome. If it is the aim of
operator to combine a differential count with the search for p
sites, this may be done by making a thinner thick smear or a th
smear spread over a larger area. Differential counts may be m
from thick smears quite expeditiously, as we have found an aver
of 10 leucocytes per field in normal smears of this character.

Dehemoglobinizing.—We still adhere to the use of hydrochl
acid alcohol for the purpose of dissolving the hemoglobin f
the blood of thick films. There appears to be no advantage in us
any of the other combinations with acetic acid or formalin, as ol
authorities have recommended. Likewise, an alcohol weaker tha
commercial 95 per cent is considered a disadvantage. It is noted t
some workers have recommended strengths of alcohol from 75 to
per cent. It has been found that the most uniformly satisfact
reagent is 2 or 3 per cent chemically pure hydrochloric acid in o
nary grain alcohol. As to the length of the time required to
the hemoglobin, it depends, first, on the thickness of the sm
second, on the freshness of the specimen; and, third, on the freshn
of the acid alcohol used. The slides should be left in contact w
the acid alcohol for a period long enough to insure fixation. T
process requires about 10 minutes. The result should be a clear wh
film when removed from the fixative. Washing out the acid alco
in running water or in several changes of water requires not m
than three to five minutes, and in thin or in very freshly made sm
a longer time than this, especially with a heavy stream of wa
tends to dissolve much of the film, which is a disadvantage.

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smear should be stained immediately after washing without waiting for the film to dry. If permitted to dry for some time, it has been my practice to dip the cleared specimen in water preparatory to staining.

Preparing the stain.—Methylene blue and eosin combined as directed are used in preparing the stain. Any good stain can be safely recommended to substitute the Grubler dye of former days. For the methods of this special staining the best brands of American stains do equally well. The methylene blue powder ordinarily used and giving good results in bacteriological work may be recommended. The medicinally pure methylene blue has not been sufficiently tested, and therefore is not recommended for this purpose. Any good brand of American-made eosin is safe to use whether red, yellow, water soluble, or alcohol soluble. Good results have been obtained with all of these.

Goldhorn's method of polychroming the methylene blue is preferred. This process has proved generally satisfactory. One gram of methylene blue is added to one-half gram of lithium carbonate in 100 cubic centimeters of distilled water. The mixture is allowed to stand for five or six hours or overnight and applied without filtering. If it is desirable to use the stains immediately after mixing, the process can be hastened by heating in a water bath at a temperature of 65° C. for a period of 30 minutes. If the matter of time is not to be considered, the polychroming may be accomplished overnight. The 1 per cent methylene blue is employed as the stock stain. The eosin stock is made conveniently in a 3 per cent aqueous solution and can be used immediately after thorough mixing.

The dilutions for staining are prepared as follows:

Three cubic centimeters of the stock methylene blue are added to 100 cubic centimeters of distilled water and 2.5 cubic centimeters of stock eosin are added to 100 cubic centimeters of distilled water, and kept separately. The cleared specimen is stained in the blue for four minutes, in the eosin one minute, and again in the blue one minute; rinsing in eosin finally is optional. It is wise to rinse off the stain in transferring from one stain to another, so that the staining may be more exact and stain precipitation avoided. The washing after staining should be done cautiously; a mere rinsing is sufficient. The slides should not be blotted, but allowed to dry in the air or by aid of an electric fan.

Slide holders.—A large variety of slide holders is now available for use in the preparation of large numbers of blood specimens. The type of holder depends on the number of smears one wishes to prepare simultaneously. The glass staining jars, with partitions for holding the slides, are very convenient, preferably the flat dish of 100 cubic centimeters capacity, holding 10 to 20 slides. Another

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container. It is necessary to provide glass trays to accom
slide carriers of the various types. Separate containers a
for holding the two stains and the acid alcohol and for
water. In an ordinary glass staining dish only one conta
quired, as the solutions are poured in and out without re
slides. This latter type of staining dish is recommended
smaller operations and when it is desirable to economi
with the various reagents.

If, as rarely occurs, precipitated stain is deposited on
films, it is quickly removed by first dipping the slide in
then immersing in Wright's stain, which is kept indefinitel
for this purpose exclusively. In addition to removing t
tated stain, if such action is desired, the Wright stain is
intensifying the color of the cells. Neither dilute aceti
methyl alcohol used alone will clear the deposited excess st
decolorizing the stained cells to some extent.

Examination of the specimen.—It is to be pointed out
person examines blood smears exclusively every aid should
to facilitate not only rapidity of work but primarily co
convenience to the microscopist, as, on all accounts, eye s
be guarded against. Therefore, I prefer the lowest power
of both ocular and objective. I believe that there is a d
advantage in using the highest powers on account of the lin
scanned and the eye strain often resulting. In rapid ex

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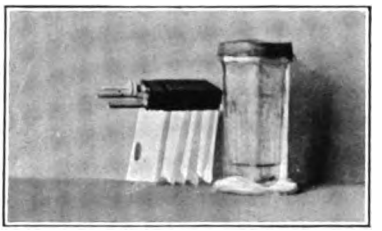

Fig. 1.—Mechanical slide-holding rack with rubber plates graduated on metal rods, and glass staining jar of familiar type.

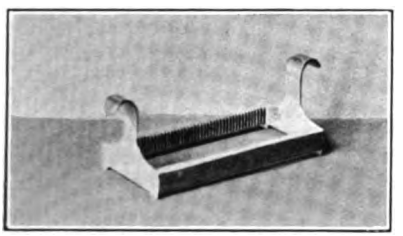

Fig. 2.—Metal slide holder of acid-proof metal.

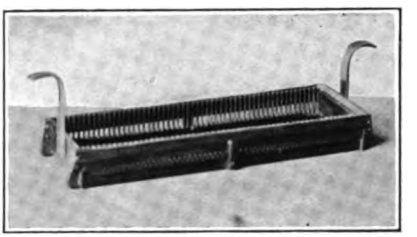

Fig. 3.—Hard rubber slide holder made of hair combs.

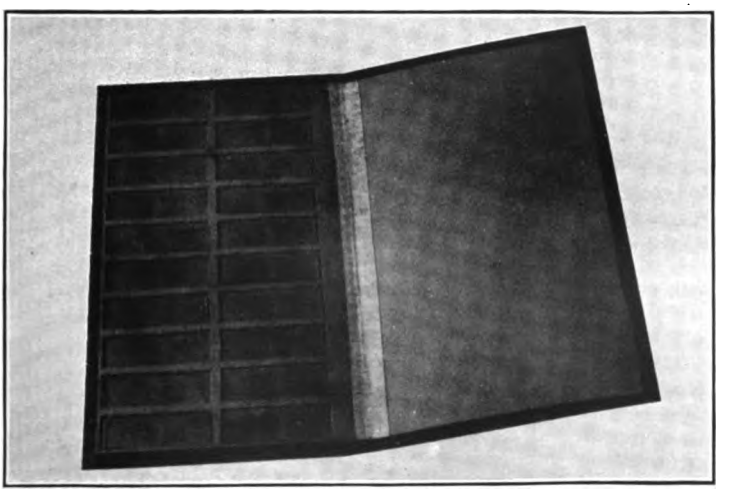

Fig. 4.—Cardboard tray for holding wet blood films.

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stock stain. Thi
To obtain the bes
for each lot of 20
the blood specime
of decided advant
them soon after th
dried blood films
to the treatment of
isfactory results.

The writer desire
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VENEREAL

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Health officers generally are n
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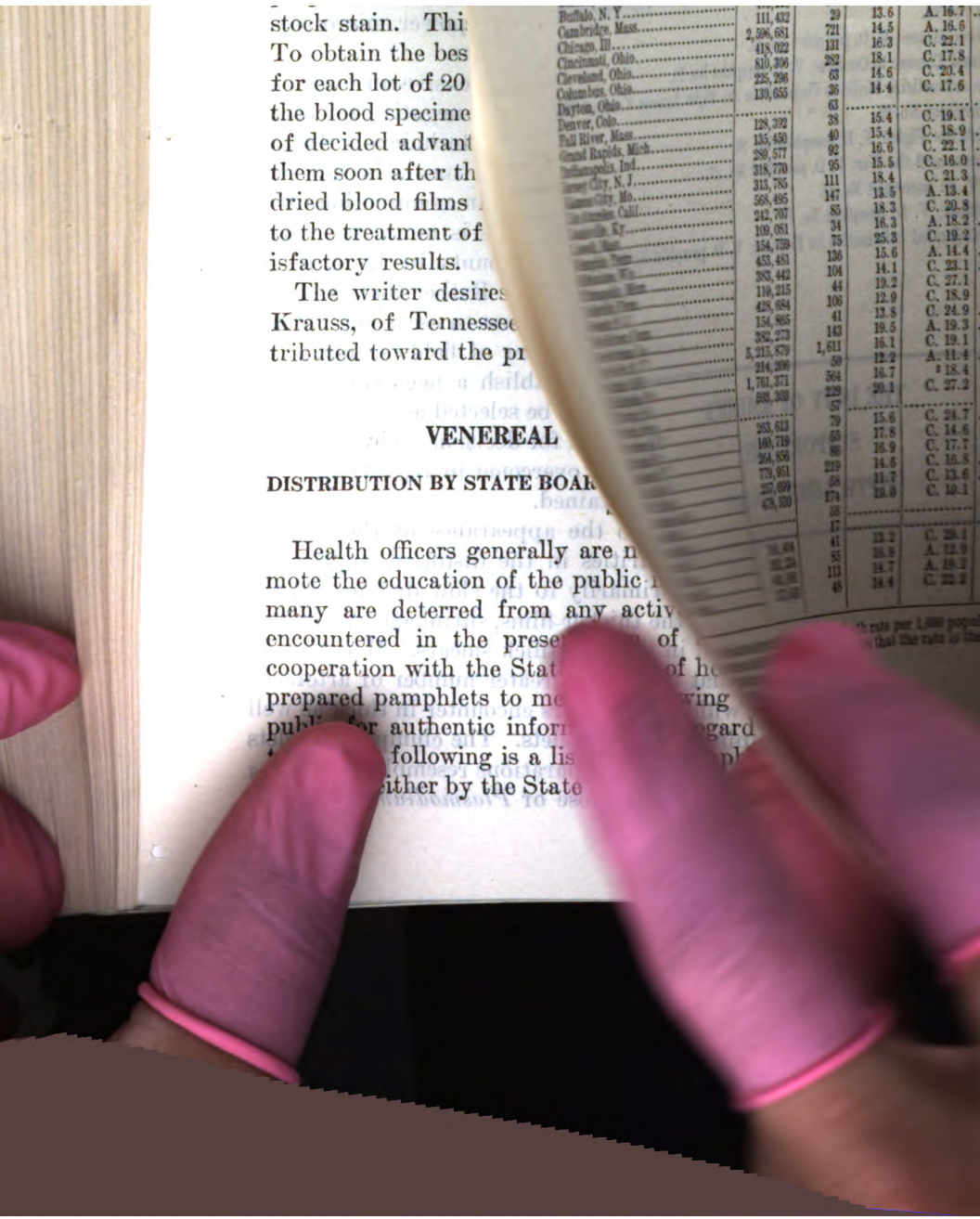
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Cincinnati, Ohio. 810,396 282 18.1 C. 17.8
Cleveland, Ohio. 225,296 63 14.6 C. 20.4
Columbus, Ohio. 130,655 36 14.4 C. 17.6
Dayton, Ohio. 63
Denver, Colo. 128,392 38 15.4 C. 19.1
Fall River, Mass. 135,450 40 15.4 C. 18.9
Grand Rapids, Mich. 289,577 92 16.6 C. 22.1
Indianapolis, Ind. 318,770 95 15.5 C. 16.0
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Memphis, Tenn. 154,759 75 25.3 C. 19.2
Milwaukee, Wis. 453,481 136 15.6 A. 14.4
Minneapolis, Minn. 383,442 104 14.1 C. 23.1
Nashville, Tenn. 110,215 44 19.2 C. 27.1
Newark, N. J. 428,684 106 12.9 C. 18.9
New Haven, Conn. 154,865 41 13.8 C. 24.9
New Orleans, La. 382,273 143 19.5 A. 19.3
New York, N. Y. 5,215,879 1,611 16.1 C. 19.1
Omaha, Nebr. 214,206 59 12.2 A. 11.4
Philadelphia, Pa. 1,761,371 564 14.7 * 18.4
Pittsburgh, Pa. 588,308 229 20.1 C. 27.2
Portland, Oreg. 57
Providence, R. I. 253,613 79 15.6 C. 24.7
Richmond, Va. 160,719 55 17.8 C. 14.6
Rochester, N. Y. 264,856 88 16.9 C. 17.7
St. Louis, Mo. 779,951 219 14.6 C. 16.8
St. Paul, Minn. 257,699 58 11.7 C. 13.6
San Francisco, Calif. 478,530 174 18.0 C. 19.1
Seattle, Wash. 68
Toledo, Ohio. 17
Washington, D. C. 41 13.2 C. 20.1
Wheeling, W. Va. 55 16.9 A. 12.9
Wilmington, Del. 113 14.7 A. 19.2
Worcester, Mass. 48 14.4 C. 22.3

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THE GOVERNMENT
AND CONTROL OF
VENEREAL DISEASES
AN APPEAL TO PHYSICIANS FOR COOPERATION IN THE FIGHT AGAINST VENEREAL DISEASES
Venereal Diseases and the War
FIT TO FIGHT

842—3

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Retail Druggists to Cooperate in Protecting the Fighting Forces;
. 21.
Home; V. D. pamphlet No. 23.
Disease to Continue; V. D. pamphlet No. 24.
dvertising Media to Cooperate in the Fight Against Venereal Dis-
hlet No. 25.
the Fight? V. D. pamphlet No. 26.
s and the War; V. D. pamphlet No. 27.
D. pamphlet No. 28.
ts; V. D. pamphlet No. 29.
dential Information for Patients; V. D. pamphlet No. 31.

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DEATHS DURING WEEK ENDED APRIL 12, 1919, IN CITIES.

The table following shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined in certain large cities of the United States during the week ended April 12, 1919.

The data are taken from the "Weekly Health Index," April 15, 1919, issued by the Bureau of the Census, Department of Commerce.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended Apr. 12, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding year.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,585	43	19.9	C. 25.0	9	4.1
Atlanta, Ga.	201,732	55	14.2	C. 23.0	.....	.....
Baltimore, Md.	[2] 669,981	230	17.9	A. 21.1	31	2.4
Boston, Mass.	785,245	292	19.4	A. 17.8	42	2.8
Buffalo, N. Y.	473,229	173	19.1	C. 18.8	35	3.9
Cambridge, Mass.	111,432	29	13.6	A. 16.7	.....	.....
Chicago, Ill.	2,506,681	721	14.5	A. 16.6	135	2.7
Cincinnati, Ohio.	418,022	131	16.3	C. 22.1	23	2.9
Cleveland, Ohio.	810,306	282	18.1	C. 17.8	87	5.6
Columbus, Ohio.	225,296	63	14.6	C. 20.4	20	4.6
Dayton, Ohio.	130,655	36	14.4	C. 17.6	12	4.8
Denver, Colo.	.....	63	.....	.....	.....	.....
Fall River, Mass.	128,392	38	15.4	C. 19.1	5	2.0
Grand Rapids, Mich.	135,450	40	15.4	C. 18.9	.....	.....
Indianapolis, Ind.	289,577	92	16.6	C. 22.1	.....	.....
Jersey City, N. J.	318,770	95	15.5	C. 16.0	.....	.....
Kansas City, Mo.	313,785	111	18.4	C. 21.3	45	7.5
Los Angeles, Calif.	568,495	147	13.5	A. 13.4	21	1.9
Louisville, Ky.	242,707	85	18.3	C. 20.8	15	3.2
Lowell, Mass.	109,081	34	16.3	A. 18.2	.....	.....
Memphis, Tenn.	154,759	75	25.3	C. 19.2	14	4.7
Milwaukee, Wis.	453,481	136	15.6	A. 14.4	.....	.....
Minneapolis, Minn.	383,442	104	14.1	C. 23.1	.....	.....
Nashville, Tenn.	119,215	44	19.2	C. 27.1	9	3.9
Newark, N. J.	428,684	106	12.9	C. 18.9	19	2.3
New Haven, Conn.	154,865	41	13.8	C. 24.9	.....	.....
New Orleans, La.	382,273	143	19.5	A. 19.3	.....	.....
New York, N. Y.	5,215,879	1,611	16.1	C. 19.1	370	3.7
Oakland, Calif.	214,206	69	12.2	A. 11.4	.....	.....
Philadelphia, Pa.	1,761,371	564	16.7	[3] 18.4	117	3.5
Pittsburgh, Pa.	598,308	239	20.1	C. 27.2	83	7.3
Portland, Oreg.	.....	57	.....	.....	8	.....
Providence, R. I.	263,613	79	15.6	C. 24.7	.....	.....
Richmond, Va.	169,719	55	17.8	C. 14.6	8	2.6
Rochester, N. Y.	264,856	86	16.9	C. 17.7	12	2.4
St. Louis, Mo.	779,951	219	14.6	C. 16.8	.....	.....
St. Paul, Minn.	257,699	58	11.7	C. 13.6	.....	.....
San Francisco, Calif.	478,580	174	19.0	C. 19.1	34	3.7
Seattle, Wash.	.....	58	.....	.....	7	.....
Spokane, Wash.	.....	17	.....	.....	.....	.....
Syracuse, N. Y.	161,404	41	13.2	C. 29.1	4	1.3
Toledo, Ohio.	262,234	85	16.9	A. 12.9	27	5.4
Washington, D. C.	401,681	113	14.7	A. 19.2	13	1.7
Worcester, Mass.	173,650	48	14.4	C. 22.2	8	2.4

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.

[2] Population estimated as of July 1, 1919.

[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED APR. 19.

CHARLESTON SANITARY DISTRICT, S. C.

Smallpox:	Cases.
Charleston	1

CAMP DIX ZONE, N. J.

No cases of communicable disease reported.

FAYETTEVILLE SANITARY DISTRICT, N. C.

Gonorrhea	4
Measles	8
Smallpox	2
Tetanus	2

CAMP FUNSTON ZONE, KANS.

Junction City:	
Chicken pox	2
Gonorrhea	1
Mumps	1
Smallpox	1
Manhattan:	
Chicken pox	1
Gonorrhea	2
Influenza	4
Mumps	2
Pneumonia	2

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Cerebrospinal meningitis:	
Muscogee County	1
Gonorrhea:	
Columbus	9
Girard	1
Muscogee County	1
Hookworm:	
Columbus	4
Malaria:	
Columbus	1
Measles:	
Columbus	14
Muscogee County	1

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.—continued.

Mumps:	Cases.
Columbus	3
Muscogee County	1
Pellagra:	
Columbus	17
Pneumonia:	
Columbus	5
Smallpox:	
Columbus	2
Muscogee County	3
Syphilis:	
Bibb City	2
Columbus	7
Muscogee County	3
Tuberculosis:	
Columbus	1
Whooping cough:	
Columbus	8

CAMP GORDON ZONE, GA.

Atlanta:	
Chancroid	1
Chicken pox	11
Diphtheria	2
Gonorrhea	52
Influenza	5
Measles	6
Mumps	1
Pneumonia	2
Scarlet fever	8
Smallpox	33
Syphilis	40
Tuberculosis	15
Whooping cough	1

GULFPORT HEALTH DISTRICT, MISS.

Chicken pox:	
Long Beach	1
Pascagoula	3

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EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED APR. 19—Continued.

GULFPORT HEALTH DISTRICT, MISS.—contd.

	Cases.
Gonorrhea:	
Gautier	1
Pascagoula	1
Moss Point	1
Hookworm:	
Ocean Springs	5
Standard	1
Influenza:	
Biloxi	1
Wade	1
Malaria:	
Biloxi	2
Escatawpa	3
Handsboro	2
Logtown	3
Mississippi City	2
Moss Point	4
Pascagoula	1
Pineville	1
Gulfport	1
Measles:	
Escatawpa	1
Moss Point	1
Mumps:	
Biloxi	3
Gulfport	5
Kreole	2
Long Beach	1
Mississippi City	10
Pellagra:	
Gulfport	1
Mississippi City	3
Pneumonia:	
Caesar	1
Biloxi	4
Gautier	1
Gulfport	2
Smallpox:	
Picayune	2
Whooping cough:	
Gulfport	1
Hovey	2
Long Beach	1
Saucier	1

CAMP A. A. HUMPHREYS ZONE, VA.

Alexandria:	
Diphtheria	1
Gonorrhea	2
Measles	1
Mumps	4
Smallpox	3
Syphilis	1
Tonsilitis	1
Tuberculosis, pulmonary	1
Typhoid fever	2
Fairfax County:	
Gonorrhea	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	2
Measles	1

CAMP JACKSON ZONE, S. C.—continued.

	Cases.
Columbia—Continued.	
Mumps	2
Smallpox	4
Whooping cough	2
Government clinic:	
Chancroid	1
Gonorrhea	22
Syphilis	26

CAMP LEE ZONE, VA.

Petersburg:	
Gonorrhea	8
Syphilis	8
Prince George County:	
Whooping cough	1

CAMP LEWIS ZONE, WASH.

Chicken pox:	
Roy	4
Influenza:	
Stellacoom	5
Measles:	
Stellacoom	11
Mumps:	
Dupont	1
Parkland	5
Tuberculosis:	
Parkland	1

CAMP MERRITT ZONE, N. J.

Englewood:	
Chicken pox	3
Influenza	7
Measles	1
Pneumonia	3
Syphilis	1
Tuberculosis, pulmonary	1
Haworth:	
Measles	3

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Florence:	
Chicken pox	2
Scarlet fever	1
Nitrate plant No. 2:	
Chancroid	1
Gonorrhea	19
Influenza	9
Pneumonia	4
Syphilis	8
Sheffield:	
Chicken pox	1
Mumps	8

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	1
Measles	3
Mumps	3
Syphilis	1

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EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED APR. 19—Continued.

CAMP PIKE ZONE, ARK.

	Cases.
Chancroid:	
Little Rock	4
Chicken pox:	
Little Rock	8
North Little Rock	1
Gonorrhea:	
Little Rock	14
North Little Rock	1
Influenza:	
Little Rock	2
North Little Rock	1
Malaria:	
Little Rock	3
Mumps:	
Little Rock	6
Pneumonia:	
North Little Rock	1
Scott	1
Scarlet fever:	
Little Rock	1
North Little Rock	5
Smallpox:	
Little Rock	1
Syphilis:	
Scott	1
Little Rock	9
Tonsilitis:	
Little Rock	2
Tuberculosis:	
Little Rock	5
North Little Rock	1
Levy	1

CAMP POLK ZONE, N. C.

Cerebrospinal meningitis:	
Durham	1
Chicken pox:	
Durham	21
Durham Township	1
Middle Creek Township	1
Raleigh	8
Gonorrhea:	
Durham	3
Mumps:	
Durham	2
Smallpox:	
Durham	2
Holly Springs Township	1
White Oak Township	1
Syphilis:	
Durham	3
Tuberculosis:	
Raleigh	1
Typhoid fever:	
Raleigh	1
Whooping cough:	
Cedar Fork Township	5
Durham	5
White Oak Township	2

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

	Cases.
Chicken pox:	
Norfolk	2
Measles:	
Norfolk	3
Portsmouth	1
Port Norfolk	1
Scarlet fever:	
Norfolk	1
Portsmouth	1
Smallpox:	
Norfolk	4
Tuberculosis:	
Portsmouth	3

CAMP SHERIDAN ZONE, ALA.

Montgomery:	
Measles	2
Scarlet fever	5
Syphilis	1
Government clinic:	
Chancroid	1
Gonorrhea	14
Syphilis	16

CAMP SHERMAN ZONE, OHIO.

Chillicothe:	
Diphtheria	2
Measles	1
Scarlet fever	3
Tuberculosis, pulmonary	1
Government clinic:	
Gonorrhea	9
Syphilis	4

SOUTHER FIELD ZONE, GA.

Mumps	1

TIDEWATER HEALTH DISTRICT, VA.

Bubo:	
Government clinic	1
Chicken pox:	
Newport News	2
Gonorrhea:	
Government clinic	27
Newport News	10
Measles:	
Newport News	1
Meningitis, tubercular:	
Newport News	1
Mumps:	
Newport News	1
Pertussis:	
Fochil	8
Pneumonia:	
Newport News	2
Rubella:	
Newport News	1
Scarlet fever:	
Newport News	1

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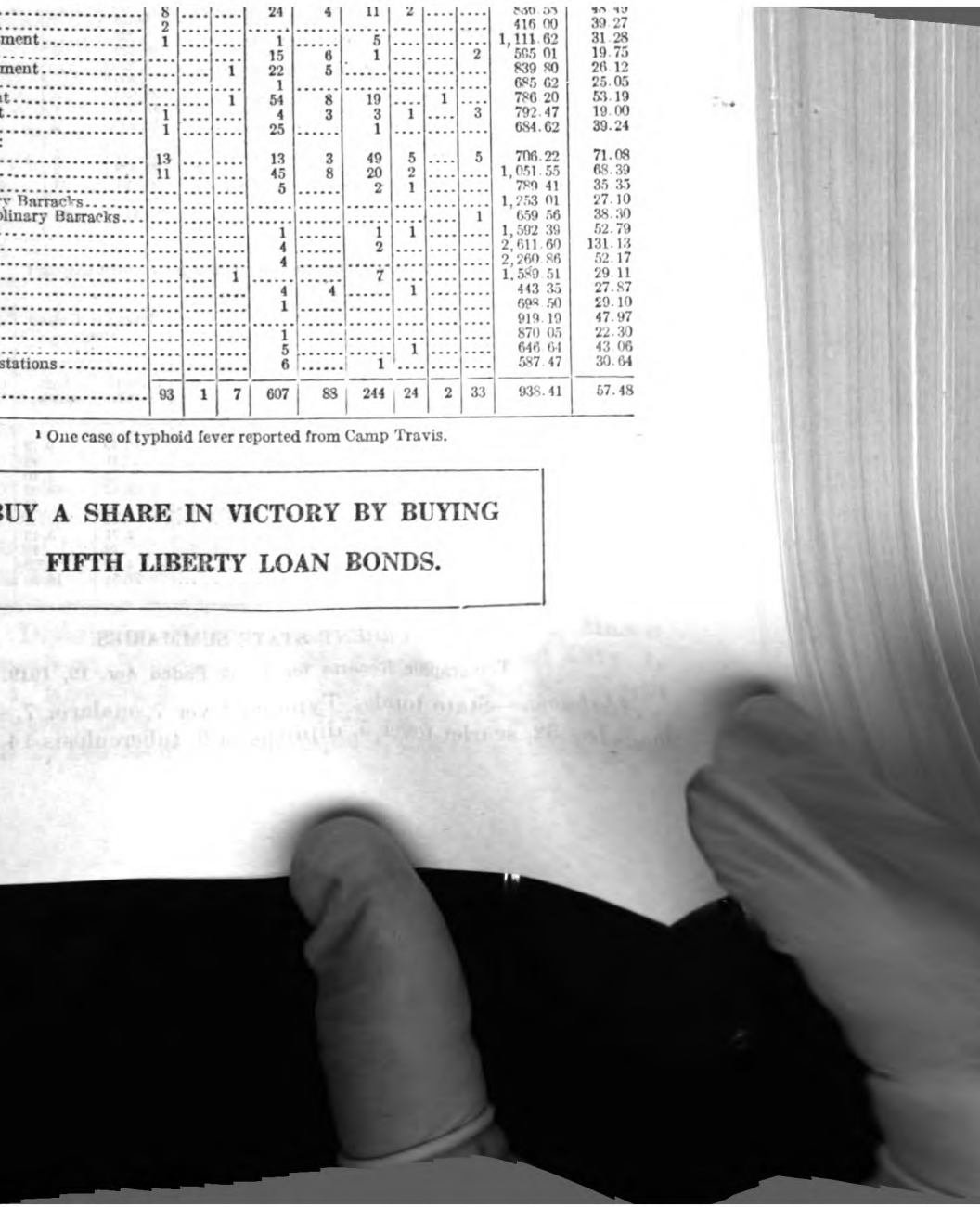
[1] One case of typhoid fever reported from Camp Travis.

BUY A SHARE IN VICTORY BY BUYING

FIFTH LIBERTY LOAN BONDS.



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Number of deaths and annual rates per 1,000 at large camps in the United States, week ended Apr. 11, 1919.

Camp.	Strength.	Deaths.		Annual death rate per 1,000.	
		All causes.	Disease only.	All causes.	Disease only.
Bowie	4,409	1	1	11.79	11.79
Bragg	1,067				
Custer	5,400	1	1	9.62	9.62
Devens	20,548	1	1	2.53	2.53
Dix	17,505	2	2	5.94	5.94
Dodge	8,028	1	1	6.47	6.47
Eustis	449				
Fremont	193				
Funston	5,858				
Gordon	7,823				
Grant	12,012	2	2	8.63	8.63
Humphreys	2,132				
Jackson	10,021	1	1	5.18	5.18
Kearny	3,465	1	1	9.80	9.80
Henry Knox	11,750	2	2	8.85	8.85
Lee	10,216	1	1	5.07	5.07
Lewis	5,716	1	1	9.09	9.09
Meade	11,782	4	4	17.65	17.65
Pike	6,987	1	1	7.44	7.44
Shelby	3,301				
Sherman	14,347	1	1	3.62	3.62
Taylor	12,451				
Travis	5,842				
Upton	21,328	2	2	4.87	4.87
Wheeler	495				
Las Casas	1,375				
Northeastern Department	3,228				
Eastern Department	20,452	5	2	12.71	5.08
Southeastern Department	8,421				
Central Department	5,309				
Southern Department	33,933	3	3	4.59	4.59
Western Department	10,619				
Aviation camps	19,903	2	1	5.23	2.61
Port of embarkation:					
Hoboken	38,736	5	5	6.71	6.71
Newport News	21,610	2	1	4.81	2.42
All others	95,334	44	42	24.00	22.91
Total	462,118	83	76	9.36	8.57

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American expeditionary forces.	
	Current week.	Last week.	Current week.	Last week
Pneumonia	10.49	9.72	12.26	13.93
Dysentery	.11	.43	.73	.57
Malaria	.79	1.40	.19	.39
Venereal	68.62	68.05	56.29	34.97
Paratyphoid		.19	4.37	
Typhoid	.11		.69	1.04
Measles	2.71	3.13	1.97	3.07
Meningitis	.22	.75	.61	1.12
Scarlet fever	3.72	5.29	.85	.39
Influenza	27.54	18.36		

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended Apr. 19, 1919.

Alabama.—State totals: Typhoid fever 7, malaria 7, smallpox 29, measles 32, scarlet fever 5, diphtheria 9, tuberculosis 14, influenza 4.

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Arkansas.—State totals: Influenza 27, measles 36, malaria 48, mumps 13, tuberculosis 11, chickenpox 10, whooping cough 9, smallpox 7, diphtheria 7, trachoma 2, scarlet fever 1, pellagra 1.

California.—Influenza: 884 cases reported. Smallpox: 29 cases, of which in San Francisco 7, Tulare County 8, Los Angeles 1, Long Beach 6, Chico 5, Corcoran and Grass Valley 1 each. Typhoid fever: 9 cases, of which in San Francisco 3, Orange City 2, 1 each in Fresno County, South San Francisco, Los Angeles and Orange County. Cerebrospinal meningitis: 4 cases, of which 1 each in San Francisco, United States naval training station, Los Angeles (city) and County. Lethargic encephalitis: 1 case at Long Beach.

Connecticut.—No outbreak or undue prevalence noted. Influenza: total cases 71.

Florida.—State totals: Typhoid fever 32, malaria 18, diphtheria 10. Smallpox: Pinellas County 1. Scarlet fever: Gadsden County 1.

Georgia.—State totals: Hookworm 1, anthrax 1, cerebrospinal meningitis 1, chicken pox 37, diphtheria 5, dysentery (amebic) 1, dysentery (bacillary) 1, German measles 1, gonorrhea 42, influenza 10, malaria 14, measles 51, mumps 22, pneumonia (acute lobar) 10, poliomyelitis 1, rabies 1, scarlet fever 9, septic sore throat 1, smallpox 61, syphilis 19, tuberculosis (pulmonary) 16, tuberculosis (other than pulmonary) 1, typhoid fever 4, whooping cough 9.

Illinois.—Diphtheria: Cases reported 142, of which in Chicago 114, Maywood 5. Scarlet fever: Ninety-three cases, of which in Chicago 46, Milledgeville 10, Camp Grant 8. Smallpox: One hundred cases, of which in Amboy 16; Lee Center Township, Lee County, 16; Amboy Township, Lee County, 8; May Township, Lee County, 6; Canton 5; Champaign 4; Danville 4; Galesburg, Bloomington, East St. Louis, Pekin and Rankin 3 each. Meningitis: Chicago 1 and Elkhorn Grove Township, Carroll County, 1. Poliomyelitis: Chicago 1. Lethargic encephalitis: Chicago 2; Cortland Township, Dekalb County, 1; Cotton Hill Township, Sangamon County, 1. Gonorrhea 167 and syphilis 83. Influenza: Eighty-one cases, of which in Chicago 65. No recrudescence of influenza is noted.

Indiana.—Scarlet fever: Thirteen cases in Mishawaka. Diphtheria by counties: Posey 1, Howard 3, Allen 1, Fountain 1, Kosciusko 1, Hendricks 2. Rabies by counties: Scott 1, Clay 1, Johnson 1. Typhoid fever by counties: Lake 1, Tippecanoe 1. Syphilis 28, gonorrhea 43, chancroid 2.

Iowa.—Cerebrospinal meningitis: Des Moines, 1. Chicken pox: Dubuque 1. Diphtheria: Council Bluffs 2, Des Moines 2, Mason City 2. Gonorrhea: Davenport 7, Des Moines 6, Forest City 1, Mason City 1, Renwick 5. Measles: Bellevue 3, Mumps: North Wood 11. Scarlet fever: Baxter 1, Burlington 3, Cedar Falls 1, Cedar Rapids 2, Des Moines 7, Dubuque 4, Leland 1. Smallpox:

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Albia 4, Boone 3, Cedar Falls 1, Cedar Rapids 8, Council Bluffs 2, Davenport 17, Des Moines 1, Fort Dodge 3, Mason City 1. Syphilis: Des Moines 1, Knoxville 1. In rural districts of the following counties. Diphtheria: 1 each in Buena Vista, Hancock, and Clinton. Scarlet fever: 1 each in Cerro Gordo, Clarke, Des Moines, Floyd, Howard, Mahaska, Sac, Warren, and Washington. Smallpox: Buena Vista 5, Carroll 1, Cherokee 1, Dallas 1, Marshall 1.

Kansas.—Meningitis by cities: Hope 1. State totals: Smallpox 49, typhoid fever 2, diphtheria 16, influenza 726, scarlet fever 50.

Louisiana.—State totals: Lethargic encephalitis 3, meningitis 4, influenza 30, typhoid fever 22, smallpox 62, gonorrhea 88, syphilis 57, chancroid 7.

Maine.—Chicken pox: Bath 1. Diphtheria: Portland 1, Westbrook 7. Gonorrhea: 1 each in Skowhegan, Belfast, Danforth, Farmington, Lincoln, Orono, Norway, Stockton Springs, Waterville, Bangor, Bath, and Gardiner; Camden 3, Portland 9. Mumps: Bath 2. Scarlet fever: Farmington 9, Freeport 2, Portland 8, South Portland 3, Veazie 1, York 6, Westbrook 1. Syphilis: Portland 2, Bangor 3, Bath 1, Houlton 1, Waterville 1, Skowhegan 3. Typhoid fever: Portland 1. Whooping cough: Portland 1. Tuberculosis: 26 cases. Influenza: Milo 4.

Minnesota.—Smallpox (new foci): Dodge County (Ripley Township) 1, Hennepin County (Minnetonka Township) 1, Hubbard County (White Oak Township) 2, Hubbard County (Nevis Township) 4, Kandiyohi County (Harrison Township) 2. Syphilis 36, gonorrhea 88, chancroid 3.

New Jersey.—Cases reported: Influenza 281, pneumonia 149. Unusual prevalence of smallpox in Cape May and Atlantic Counties.

New York.—(Outside of New York City). State totals: Typhoid fever 13, measles 326, scarlet fever 141, whooping cough 159, smallpox 2 of which in Buffalo 1 and Amherst 1, poliomyelitis in Herkimer village 1, pneumonia 152, syphilis 227, gonorrhea 67.

North Carolina.—Whooping cough 109, measles 314, diphtheria 18, scarlet fever 13, septic sore throat 2, smallpox 94, chicken pox 71, infantile paralysis 1, typhoid fever 8, epidemic meningitis 2, bronchopneumonia 12, lobar-pneumonia 18, dysentery (bacillary) 3. Cleveland County reports 95 new cases influenza and Gaston County 7.

Ohio.—Scarlet fever: Cincinnati 25. Typhoid fever: Wellsville 6. Lethargic encephalitis: Yellow Springs (Greene County) 1. Influenza negligible.

Oregon.- Portland reports 9 cases of influenza, Clackamas 3, Linn 1, and Tillamook 28.

Vermont.--No outbreak or unusual prevalence.

Virginia.--Infantile paralysis: Pittsylvania County 1. Lethargic encephalitis: Prince William County 1. Smallpox: Alexandria 6, Norfolk 1. Influenza: 2 cases reported.

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Washington.—Unusual prevalence of contagious diseases. Measles: Bremerton 20, Charleston 9, Steilacoom 11, Tacoma 18, Seattle 28. Smallpox: Seattle 20, Ellensburg 14, Centralia 5, Tacoma 12, Spokane 11. Scarlet fever: Seattle 9, Tacoma 6, Auburn 2, Waitsburg 4, Yakima County 10.

ANTHRAX.

Norwood, Ohio, Week Ended April 5, 1919.

During the week ended April 5, 1919, one case and one death from anthrax were reported at Norwood, Ohio.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 19, 1919.

	Cases.
Gas and flame school zone, Ga. and Ala.	1
Camp Polk zone, N. C.	1
Camp Travis zone, Tex.	2

State Reports for February and March, 1919.

Place.	New cases reported.
District of Columbia (March)	2
Illinois (March):	
Cook County—	
Chicago	10
St. Clair County—	
Belleville	1
East St. Louis	1
Winnebago County	2
Total	14
Louisiana (March):	
Lincoln Parish	1
Orleans Parish	1
Pointe Coupee Parish	1
Rapides Parish	1
Vermilion Parish	2
Washington Parish	1
Total	7
Maryland (March):	
Baltimore	6
Anne Arundel County	1
Baltimore County	1
Total	8
Montana (March):	
Musselshell County	1
New York (March):	
Herkimer County—	
Ilion	1
New York (March)—Continued.	
Monroe County—	
Rochester	3
Nassau County—	
Hempstead (town)	1
Onondaga County—	
Syracuse	1
Oswego County—	
Mexico (town)	1
Otsego County—	
Oneonta	1
Saratoga County—	
Corinth (town)	1
Westchester County—	
New Rochelle	1
Bronxville	1
North Castle (town)	4
New York City	31
Total	46
Washington (February):	
Stevens County	1
West Virginia (March):	
Mineral County	1
Wisconsin (March):	
Dodge County	1
Milwaukee County	9
Outagamie County	1
Rock County	1
Waupaca County	1
Total	13

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CEREBROSPINAL MENINGITIS—Continued.

City Reports for Week Ended Apr. 5, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Albany, N. Y.	1		Los Angeles, Calif.	1	
Beaumont, Tex.		1	Macon, Ga.	1	
Birmingham, Ala.		1	Milwaukee, Wis.	1	1
Boston, Mass.	1		Mobile, Ala.	1	
Chicago, Ill.	3	2	Montgomery, Ala.	1	
Cleveland, Ohio.	1	1	Newark, N. J.	1	
Cohoes, N. Y.		1	New Orleans, La.	3	2
Cumberland, Md.	1	1	New York, N. Y.	10	9
Detroit, Mich.	2	1	Oakland, Calif.	1	
East Orange, N. J.	1		Paterson, N. J.	4	
Flint, Mich.		1	Perth Amboy, N. J.		1
Kansas City, Mo.	1	1	Riverside, Calif.		2
Lackawanna, N. Y.	1		San Antonio, Tex.	2	1
Lockport, N. Y.		1	Tacoma, Wash.	1	

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 19, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga.	1	Camp Pike zone, Ark.	4
Camp Jackson zone, S. C.	1	Camp Sheridan zone, Ala.	1
Muscle Shoals sanitary district, Ala.	1		

DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 19, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga.	2	Camp Travis zone, Tex.	2
Camp A. A. Humphreys zone, Va.	1	Camp Upton zone, N. Y.	1
Camp Sherman zone, Ohio.	2		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 865.

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 19, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	4	Picric acid plant zone, Ga.	1
Camp Funston zone, Kans.	3	Camp Pike zone, Ark.	15
Gas and flame school zone, Ga. and Ala.	11	Camp Polk zone, N. C.	3
Camp Gordon zone, Ga.	52	Camp Sheridan zone, Ala.	14
Gulfport health district, Miss.	3	Camp Sherman zone, Ohio.	9
Camp A. A. Humphreys zone, Va.	3	Tidewater health district, Va.	37
Camp Jackson zone, S. C.	22	Camp Travis zone, Tex.	14
Camp Lee zone, Va.	8	Wilmington sanitary district, N. C.	5
Muscle Shoals sanitary district, Ala.	19		

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 19, 1919.

	Cases.		Cases.
Camp Funston zone, Kans.	4	Camp Merritt zone, N. J.	7
Camp Gordon zone, Ga.	5	Muscle Shoals sanitary district, Ala.	9
Gulfport health district, Miss.	2	Camp Pike zone, Ark.	3
Camp Lewis zone, Wash.	5	Wilmington sanitary district, N. C.	1

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LEPROSY.

District of Columbia, March, 1919.

One case of leprosy was reported in the District of Columbia during March, 1919. The patient died from smallpox March 22.

LETHARGIC ENCEPHALITIS.

Cases Reported for Week Ended Apr. 19, 1919.

	Cases.
California:	
Long Beach	1
Illinois:	
Chicago	2
DeKalb County (Cortland Township)	1
Sangamon County (Cotton Hill Township)	1
Louisiana:	
State at large	3
Ohio:	
Green County (Yellow Springs)	1
Virginia:	
Prince William County	1

State Reports for March, 1919.

Place.	New cases reported.
Illinois:	
Adams County—	
Quincy	1
Alexander County—	
Cairo	1
Brown County—	
Versailles	1
Clark County—	
Martinsville	1
Clinton County—	
Breese	1
Cook County—	
Chicago	45
Evanston	3
Glencoe	1
Harvey	1
Wilmette	2
Edgar County—	
Kansas	1
Ford County—	
Paxton	1
Lake County—	
North Chicago	2
Illinois—Continued.	
La Salle County—	
Marseilles	1
Logan County—	
Middletown	3
Macoupin County—	
Dorchester township	1
Madison County—	
Alton	2
Menard County—	
Talhula	1
Perry County—	
Duquoin	1
Richland County—	
Olney	1
Rock Island County—	
Bowling township	1
Sangamon County—	
Springfield	1
Total	73
Louisiana	17

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 19, 1919.

	Cases.
Gas and flame school zone, Ga. and Ala	1
Gulfport health district, Miss	19
Camp Pike zone, Ark	3
Camp Travis zone, Tex	1

State Reports for March, 1919.

Place.	New cases reported.
Louisiana:	
Bienville Parish	2
Caddo Parish	1
De Soto Parish	3
East Feliciana Parish	2
Grant Parish	7
Orleans Parish	3
Rapides Parish	5
St. Landry Parish	1
St. Martin Parish	1
Vermilion Parish	1
Washington Parish	5
Total	31
Maryland:	
Charles County—	
Pomfret	1
Malcolm, R. D.	1
Somerset County—	
Kingston	1
Total	3

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Marion, Ohio	4			
Marquette, Mich	3	1		
Methuen, Mass	1			
Montclair, N. J	3	2		
Morgantown, W. Va	3	1		
Newark, N. J	53	9		
New Bedford, Mass	1			
Newburyport, Mass	1			
Newport, Ky	1	1		
New York, N. Y		201	269	369
Norfolk, Va	1			
Northampton, Mass	2	2		
Oak Park, Ill	3	5		
Ossining, N. Y	4	1		
Palestine, Tex	1			
Passaic, N. J	3	3		
Paterson, N. J	28	10		
Peoria, Ill	4	8		
Perth Amboy, N. J	1	3		
Piqua, Ohio	1			
Pomona, Calif	1			
Port Chester, N. Y	5			
Poughkeepsie, N. Y	4	2		
Quincy, Mass	1			
Reno, Nev	4			
Rochester, N. Y	6	5		
Saginaw, Mich	4	2		
St. Joseph, Mo	1			
St. Paul, Minn	1	7		
San Antonio, Tex	2			
San Diego, Calif	1	1		
San Francisco, Calif	20	15		
Somerville, Mass	2	3		
Springfield, Mass	7	4		
Toledo, Ohio	1	10		
Trenton, N. J	4			
Watertown, Mass	1			
Westfield, Mass	1	1		
West Hoboken, N. J	1	1		
Winston-Salem, N. C	4	2		
Worcester, Mass	5	3		

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	82		2	12	38	30
—					
	1				1
unty—					
	1			1	
—					
	2				2
—					
	4			3	1
y—					
ille	1				1
	3				3
	12			4	8
y	20		4		16
	13		3	2	8
y	9				9
	5			1	4
nty	2				2
	9			3	6

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ille Township	1	
. Louis	6	
n	1	
n Township	2	
County—		
	1	
	2	
unty—		
oria	1	
e	2	
	40	
Township	6	
ton	1	
y—		
Precinct	7	
ecinct	46	
unty—		
t	1	
wnship	5	
y—	1	
n	1	
	1	
nty—	7	
Township	1	
	1	
nty—	1	
ty—	3	
Town-	1	
ship	3	
	1	
	401	
	7	
sh	8	
	5	

Camas	1	
Franklin County—		
Pasco	1	
Grays Harbor County—		
Aberdeen	2	
Hoquiam	1	
King County—		
Kirkland	5	
Renton	1	
Seattle	43	
Kittitas County	1	
Lewis County	6	
Centralia	1	
Mason County	1	
Okanogan County	5	
Pateros	1	
Pacific County—		
Ilwaco	1	
Pend Oreille County—		
Newport	3	
Pierce County	22	
Puyallup	13	
Tacoma	30	
Spokane County—		
Rockford	1	
Spokane	9	
Thurston County	2	
Olympia	6	
Walla Walla County	1	
Whatcom County—		
Bellingham	1	
Yakima County	24	
Yakima	55	
Total	240	

West Virginia (March):

Barbour County	1
Braxton County	6
Brooke County	3
Doddridge County	3
Fayette County	2
Greenbrier County	22
Harrison County	4
Jackson County	1
Jefferson County	1

9—3

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...ver, and tuberculosis, page 865.

TYPHOID FEVER.

ases Reported in Extra-Cantonment Zones, Week Ended Apr. 19, 1919.

	Cases.
A. Humphreys zone, Va	2
k zone, N. C	1
Tidewater health district, Va	6
Camp Upton zone, N. Y	1

State Reports for February and March, 1919.

Place.	New cases reported.
h):	
nty—	
go	
County—	
r City	11
ty—	
orest	1
Chicago	
nty—	4
nty	4
City	
County—	2
County—	2
y—	1
e	
ty—	1
nty—	3
—	4
	1
	1

Place.	New cases reported.
Illinois (March)—Continued.	
State institutions—	
Jacksonville School for Deaf (Morgan County)	5
Total	40
Louisiana (March):	
Allen Parish	4
Ascension Parish	8
Beauregard Parish	1
Caddo Parish	1
Calcasieu Parish	1
Caldwell Parish	1
East Baton Rouge Parish	2
East Feliciana Parish	2
Evangeline Parish	1
Grant Parish	1
Lafourche Parish	2
LaSalle Parish	1
Morehouse Parish	3
Natchitoches Parish	1
Orleans Parish	1
Pointe Coupee Parish	3
	17

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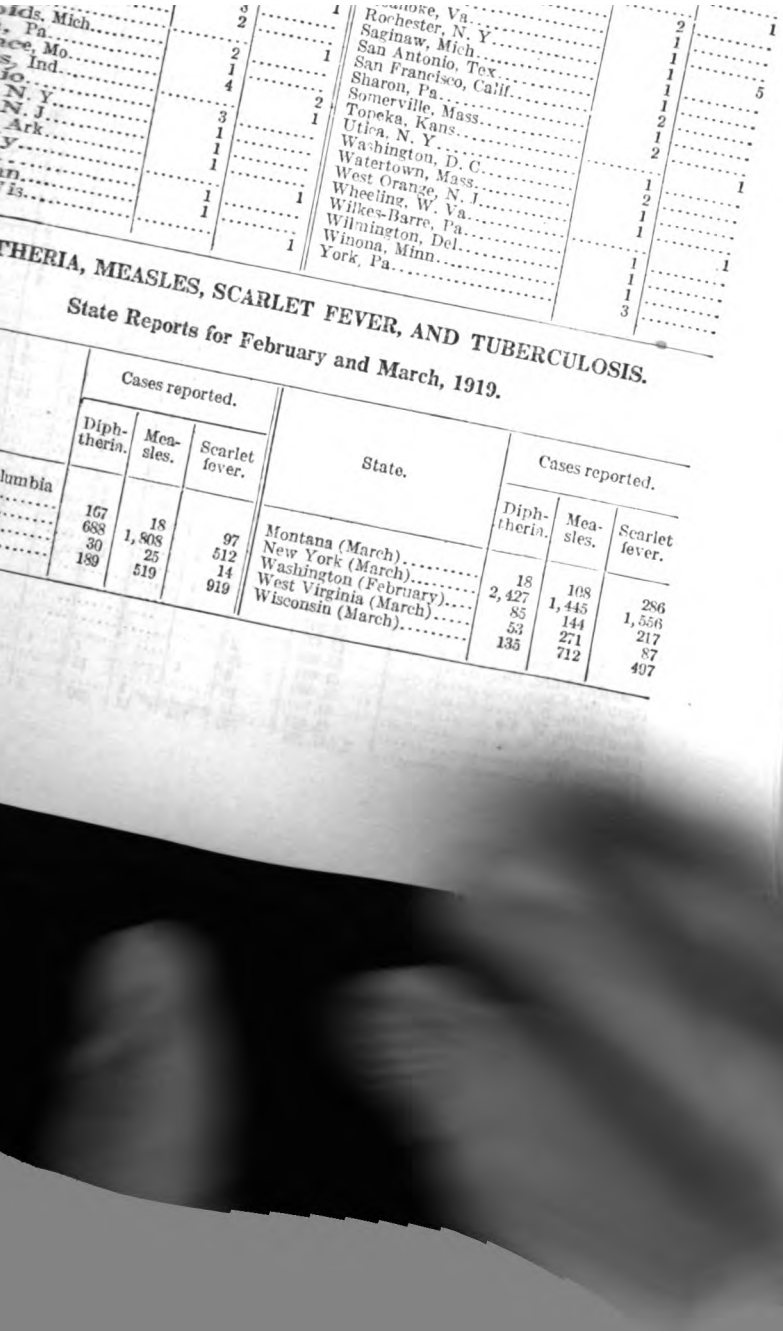

Ids, Mich.	3	1
, Pa.	2	
nce, Mo.		
s, Ind.	2	1
io	1	
N. Y.	4	
N. J.		2
Ark.	3	1
y	1	
n	1	
n	1	
is		1
	1	
		1

Roanoke, Va.	2	
Rochester, N. Y.	1	1
Saginaw, Mich.	1	
San Antonio, Tex.	1	
San Francisco, Calif.	1	5
Sharon, Pa.	1	
Somerville, Mass.	2	
Topeka, Kans.	1	
Utica, N. Y.	2	
Washington, D. C.		
Watertown, Mass.	1	1
West Orange, N. J.	2	
Wheeling, W. Va.	1	
Wilkes-Barre, Pa.	1	
Wilmington, Del.		
Winona, Minn.	1	1
York, Pa.	1	
	3	

THERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for February and March, 1919.

	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.
lumbia			
	167	18	
	688	1,808	97
	30	25	512
	189	519	14
			919

State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.
Montana (March)	18	108	286
New York (March)	2,427	1,445	1,556
Washington (February)	85	144	217
West Virginia (March)	53	271	87
Wisconsin (March)	135	712	497

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[1] Population Apr. 15, 1910.

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¹ Population Apr. 15, 1910.

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	56,084						2			
	36,832	10					1			1
	39,022	7					4			1
	47,465	13							2	
	20,274	11			1				1	1
	111,607		3		71		2			
f.	14,573	3								
	15,514	11								
	158,702	51	1		21		1		4	10
f.	20,496	8					1		1	1
	46,282	9			16		6		1	
Y.	264,714	79	2	2	7		20		6	3
	56,739	13	1	1	52		9			
ll.	29,452	13								
	24,259		1							
	15,638	10								
alif.	68,984	33	1				1		2	6
	56,469	20	1				4		1	
	86,498	27	7		1		3		2	1
	768,630	201	38		12		14	1	34	14
	252,465	75	36	4	63		21	1	19	9
	49,346	21	1				8		3	2
, Utah.	121,623	31	2	1			1		1	2
ex.	[1] 10,321	2								2
Tex.	128,215	10			1		1		9	8
o, Calif.	17,616	8								2
lif.	56,412	24	2		1		4		3	3
io.	20,226	4							1	1
	11,217	1								
, Calif.	471,023	141	16	2	6		4	1	38	11
, Calif.	15,360	12								
alif.	15,150	2								
gs, N. Y.	13,839	10								
	10,210	1	1						1	
	149,541		8		2		4		2	
	366,445		8		20		9			
	21,274		7						1	
	19,156				1					
Pa.	29,753		1		2				1	
wa.	58,568						2			
ass.	88,618	22	6		1		6		3	
nd.	70,967	17			38	1	4			1
Mass.	14,465	1							1	
S. C.	21,985	3	1				1			
l.	62,623	14	3						2	2
ass.	108,668	29	4	2	5		1		3	6
o.	41,169	19								2
hio.	52,296	12			22	1			1	

[1] Population Apr. 15, 1910

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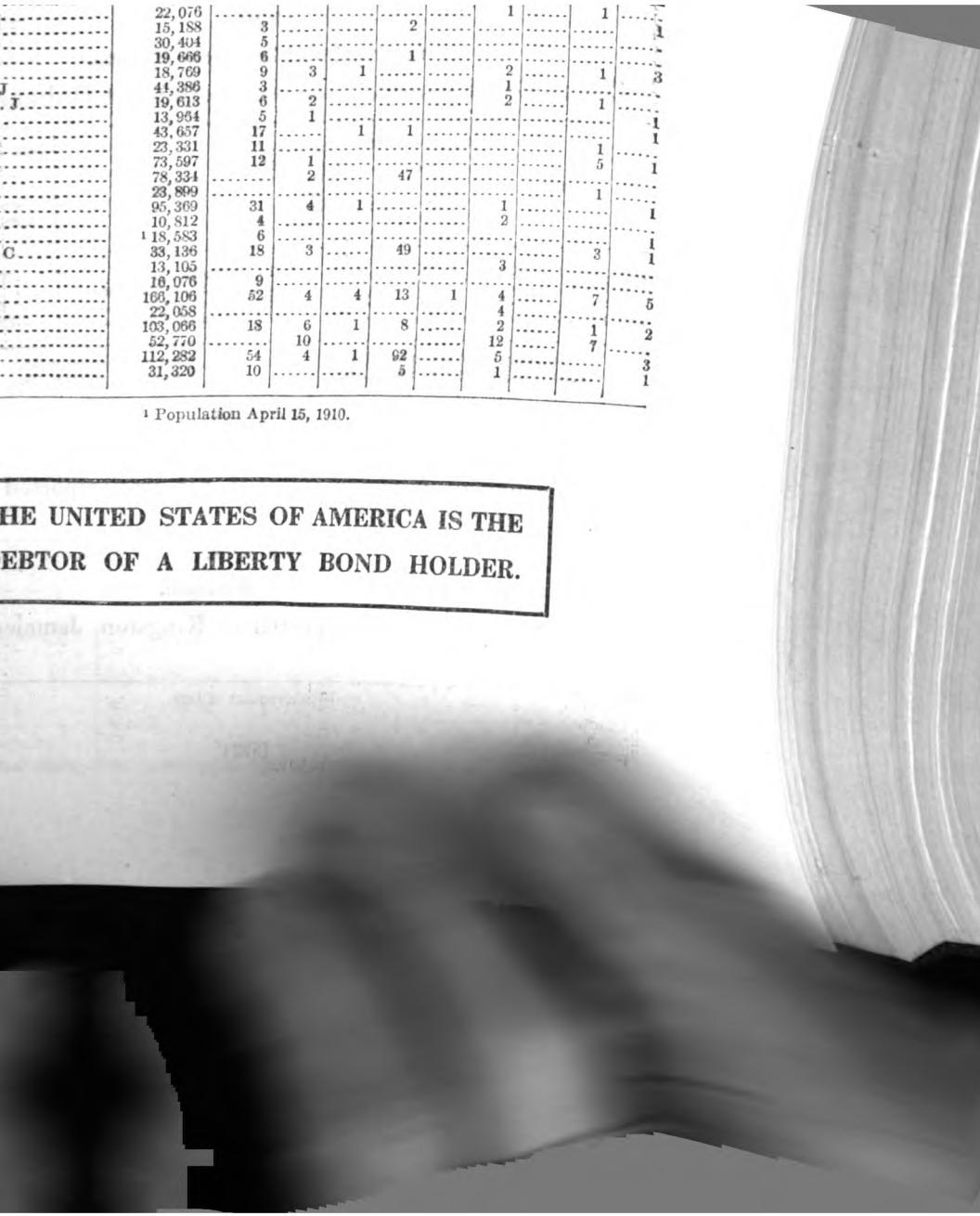
	22,076						1		1	
	15,188	3			2					1
	30,404	5								
	19,666	6			1					
	18,769	9	3	1			2		1	3
	44,386	3					1			
	19,613	6	2				2		1	
	13,954	5	1							1
	43,657	17		1	1					1
	23,331	11							1	
	73,597	12	1						5	1
	78,334		2		47					
	23,899								1	
	95,369	31	4	1			1			1
	10,812	4					2			
	[1] 18,583	6								
G	33,136	18	3		49				3	1
	13,105						3			1
	16,076	9								
	166,106	52	4	4	13	1	4		7	5
	22,058						4			
	103,066	18	6	1	8		2		1	2
	52,770		10				12		7	
	112,282	54	4	1	92		5			3
	31,320	10			5		1			1

[1] Population April 15, 1910.

HE UNITED STATES OF AMERICA IS THE
EBTOR OF A LIBERTY BOND HOLDER.



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	do	14	10
	do	6	3
	do	13	10
	do	5	3
	do	26	21
	do	8	4
	do	4	3

SMALLPOX.

	Apr. 6–12	1		
	Feb. 2–Mar. 3			Present.
	Mar. 5–11	2	1	
	Feb. 2–8	1		
	Mar. 2–15	2		
	Mar. 1–15	2	1	
	Mar. 10–16	2		
	Mar. 16–22	79	28	
	do	2		
	Mar. 29–Apr. 11	3		
	Feb. 15–21	4	2	Varioloid 2.
	Dec. 21–Jan. 31	1		
	Jan. 1–31		17	
	Feb. 1–28		16	
	Feb. 23–Mar. 8	116	11	

TYPHUS FEVER.

	Mar. 5–11	73	19
	Jan. 1–Feb. 28	2	1
	Mar. 16–22	47	

al officers of the Public Health Service, American consuls, and other sources.

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	Sept. 29–Oct. 26	5	1	
	To July 16	3,388	1,054	
	July 17–Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 5–Aug. 21, 1918: Cases, 884; deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 279.
lav	Sept. 1–20	7	6	
	do	25		Sept. 1–20, 1918; 11 cases on S. S. Helena.

PLAGUE.

	Oct. 27–Nov. 2	1	1	
	Feb. 9–15	1	1	
	Nov. 24–Dec. 8			Present.
	Dec. 1–7			Do.
	Oct. 1–Dec. 28	4	4	
	Jan. 1–31	5	4	
	Feb. 16–28	1	1	
	July 1–Dec. 31	20	7	
	Jan. 1–Feb. 28	43	13	
	Dec. 16–31	1	1	
				Jan. 1–Nov. 21, 1918: Cases, 357; deaths, 153. Jan. 1–Mar. 6, 1919: Cases, 134; deaths, 110.
	Feb. 24–27	5	2	1 septicemic.
	Feb. 22–24	4	2	2 pneumonic.
	Feb. 21–27	2	2	1 pneumonic.
	Jan. 31–Mar. 1	3	2	
	Aug. 18–Dec. 28	41	29	Sept. 23–Dec. 28, 1918: Cases, 24,279; deaths, 18,360. Dec. 29, 1918–Feb. 15, 1919: Cases, 17,525; deaths, 13,000.
	Jan. 12–Feb. 8	6	6	
	Dec. 22–28		1	
	Jan. 12–Feb. 8		3	
	Oct. 19–Dec. 28	17	17	
	Dec. 29–Jan. 25	5	5	
	Feb. 16–22	1	1	
	Dec. 8–28	26	17	
	Dec 29–Feb. 15	129	58	

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	Feb. 8–13		1	
				Nov. 24–Dec. 7, 1918: Cases, 34.
	Nov. 24–Dec. 7	18		
	do	4		
	do	1		
	do	8		In persons evacuated from the Ukraine.
	do	1		
	do	1		
	do	1		
	Jan. 26–Mar. 15	7		Of these, 2 from vessels.
	Mar. 9–15	5	1	
	Feb. 2–15		3	
	Aug. 18–Dec. 28	35	8	
	Dec. 29–Feb. 15	131	42	
	Sept. 29–Dec. 28		17	Report for week ended Nov. 23, 1918, missing.
	Dec. 29–Feb. 8		80	
	Sept. 29–Dec. 28	13	4	
	Dec. 29–Feb. 22	55	16	
	Oct. 5–Dec. 28	62	40	
	Dec. 29–Feb. 18	89	40	
	Oct. 20–Dec. 21	32	6	
	Dec. 29–Feb. 15	309	102	
	July 1–Aug. 31	87	51	
	Aug. 1–31	78	40	July 1–31, 1918: Cases, 392; deaths, 104.
	July 1–Aug. 31	335	87	
	Oct. 7–Dec. 22	20	5	
	Dec. 30–Feb. 2	8	3	
	Feb. 17–23	28	6	
	July 1–Aug. 31	11	1	
	Jan. 9–31	2	1	
	Mar. 2–8	1		Cases reported in several localities in Province.
	Jan. 31–Feb. 20	2		
	Oct. 26–Dec. 28	186	46	
	Dec. 29–Mar. 15	420	137	
	Jan. 15–Feb. 11	145	18	
	Jan. 20–26	1		Island of Formosa.
strict)				
	Oct. 7–Dec. 31	16		Oct. 7–Dec. 31, 1918: Cases, 22; deaths, 1. Jan. 1–21, 1919: Cases, 3; deaths, 3.
	Jan. 1–7	1		
	Jan. 15–21	2	2	
				Sept. 25–Dec. 18, 1918: Cases, 172; deaths, 3.

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	Dec. 28–Mar. 14	21		
	Mar. 22–28	5		
e	do	4		
arbor	Dec. 14–20	2		
lands	Jan. 11–17	6		
	Feb. 15–21	10		
erts	Dec. 21–27	1		
a	Jan. 26–31	1		
nction	Mar. 1–28	3		
Cove	Dec. 7–13	3		
	do	4		
oint	Dec. 14–20	1		
	Jan. 26–31	3		
ans Cove	Feb. 1–7	1		
mouth	Mar. 15–21			Present.
ove	Jan. 18–Mar. 14	2		
radise	Feb. 9–14	1		
	Feb. 1–7	15		
en	do			Present.
Cove	Feb. 9–14	1		
rm	Feb. 1–7	40		Bay of Islands.
Harbor	Mar. 8–14	1		
e Harbor	Dec. 7–13	4		
	Jan. 11–17	6		Feb. 7, 1919: Present.
	Dec. 7–13	60		Placentia Bay.
e	Feb. 15–21	1		
ill	do	1		Harbor Grace.
le	Feb. 15–Mar. 7	7		
es	Feb. 1–Mar. 28	32		
es	Jan. 18–24	2		
				Aug. 1–31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1–25, 1919: Cases, 28.
	Dec. 15–21	1		
	Dec. 29–Feb. 9	8		
ls:				
	Nov. 2–9	4	3	
	Dec. 29–Mar. 1	17	4	Varioloid, 13.
	Nov. 16–Dec. 28	843		
Africa:				
rques				July 1–Oct. 31, 1918: 45 fatal cases.
	Nov. 1–3	4		
	Jan. 17–23		1	
	Feb. 1–28	9	1	
	Jan. 9–Feb. 11		5	
	Feb. 19–Mar. 11	2		
	Jan. 1–Feb. 20	6		
	Oct. 1–Dec. 31	18		
	Sept. 1–Oct. 31	153		
	Jan. 1–31		58	
	Nov. 1–Dec. 31		8	
	Jan. 1–31		3	
	Nov. 10–Dec. 21	40	9	
	Dec. 29–Jan. 25	93	10	
	Feb. 16–22	44	6	

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	Dec. 15–22	2		
	Dec. 29–Feb. 15	28	3	
	Jan. 13–19	3		
	Mar. 10			Present.
	....do			Do.
	Dec. 2–15	2		
	Jan. 6–12		1	
	Feb. 24–Mar. 2	1		
	Jan. 1–31	2		
	Nov. 8–Dec. 28		3	
	Jan. 5–Mar. 8	2	3	
	Oct. 14–Dec. 31	85	36	
	Jan. 1–Mar. 2	176	50	Confined to one quarter of city and mostly to natives.
				Oct. 20–Nov. 7, 1918: Cases, 12; deaths, 1.
	Sept. 29–Oct. 19	12	8	
trict	Oct. 20–Nov. 7	1		
	....do	1		
	....do	1		
	....do	1		
	Sept. 29–Oct. 19	3	1	
	Oct. 20–Nov. 7	1	1	
	....do	2		
	Sept. 29–Oct. 19	7	2	District of Allenstein.
	Oct. 20–Nov. 7	5		
	Feb. 2–22	4		
	Dec. 22–28	5		
	Jan. 5–Feb. 8	9	1	
	Mar. 9–15	1		
	Mar. 8	2	2	
	Sept. 29–Dec. 21		34	
	Dec. 29–Feb. 15		78	
	Feb. 3–9	19		In soldiers returning from Black Sea.
	....do	3		Do.
	....do	2		
	Nov. 10–Dec. 29	13	4	
	Dec. 30–Mar. 16	30	4	
				Oct. 7–21, 1918: Cases, 5.
	Oct. 7–21	4		
				Sept. 25–Oct. 16, 1918: Cases, 8.
				Oct. 2–23: Cases, 31; deaths, 6.
	Oct. 2–23	15	4	
				Sept. 1–Oct. 26, 1918: Cases, 539; deaths, 26.

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Russia:				
Archangel	Jan. 15–Feb. 1	35	10	
Serbia				Apr. 5, 1919: Reported to be spreading.
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1–Dec. 30	43		
Do	Jan. 17–Feb. 28	73	9	
Spain:				
Huelva	Oct. 1–31		2	
Madrid	Dec. 1–31		1	
Ukraine				Apr. 5, 1919: Reported to be spreading.
Union of South Africa:				
Port Elizabeth	Sept. 14–28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Pernambuco	Oct. 1–Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29–Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1–30	1		
Catarama	Feb. 1–15	1		
Chobo	Jan. 1–15	1		
Daule	do	1	1	
Duran	Nov. 1–Dec. 31	3	2	
Do	Jan. 16–Feb. 28	4	1	
Guayaquil	July 1–Dec. 31	326	177	
Do	Jan. 1–Feb. 28	114	59	
Hacienda Vainilla	Feb. 16–28	1		
Milagro	Nov. 1–15	1		
Do	Feb. 1–15	1		
Naranjal	Nov. 1–15	1	1	
Do	Jan. 1–15	1	1	
Naranjito	Nov. 1–15	1	1	
Do	Jan. 1–Feb. 28	2	2	
Payo (Hacienda)	Nov. 1–15	1		
Punta de Piedra	Nov. 1–30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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investigations of Fischer and Hoppe (1909), Gæbel (1911), 99, 1917), Greven (1910), Kobert (1906), Lehmann (1912), (1911, 1913), Rupp (1911), and many others, it was early t the amounts of arsenic sought after would be extremely hat an exact method was essential for the success of this

steps undertaken in these determinations were to obtain control experiments. The reagents which were to be ese analyses were carefully selected and then tested for the modified Marsh-Berzelius method described in this a result of this investigation it was early learned that n the reagent bottle (even though it may indicate that arsenic present) is not sufficient or final evidence that the not contaminated by arsenic (Myers, 1916). With these nd it is advisable to test all of the reagents which are at any stage of the determination. After having been that the reagents are free of arsenic, in the sense that in tities no detectable amounts are present, then the control s may be started. (It is understood that no reagents are free from impurities, but that if sufficient quantities are ninable amounts may be found.)

oint a brief note in regard to so-called "normal" arsenic nade—a question which has involved considerable discus- ier (1899) summarizes his results in the following words: tate that arsenic, aside from the thyroid, mammary, and

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thymus glands, never occurs in the human body except in the skin, hair, bones, milk, and sometimes in the fæces, and then only in traces." Warren (1915) points out that there is no such thing as normal arsenic, and if found in the body it has come from some external source (medicinally or criminally). Kunkle (1915) says if there be a so-called normal arsenic it is exceedingly small (0.01–0.001 milligram in an organ). More recently Klason (1916) draws the conclusions from his analyses of urine that "arsenic is a normal constituent of the human body, and consequently its use as a medicine (compare iron) can be understood." Further discussion of this subject will be found in another paper discussing the amounts of arsenic found in various parts of the body. These quotations clearly indicate a difference of opinion on this subject.

In order to test the control method it is necessary to make experiments which are very similar to those by which we examine the blood and other fluids in question. Twenty cubic centimeters portions of normal guinea-pig blood are obtained and placed in porcelain casseroles. Six of these samples are used in the following manner: Sample No. 1 is used exactly as it has been obtained from the animal, while the remaining four samples are added to solutions containing 1, 3, 5, 7, and 10 parts, respectively, per million of arsenic. In this manner we have a blank experiment and five solutions containing different amounts of arsenic. At least four sets of these experiments were carried out in order to test the method which was to be used. Enough of the reagents was blanked in this way so that the entire set of experiments was uniform.

Most heavy metals enter into chemical combination with body proteins, and it has been found necessary to decompose the organic matter present in order to make an analysis of the metal. The samples which are contained in the porcelain casseroles are now treated drop by drop with a mixture of fuming nitric acid and concentrated sulphuric acid in the proportion of 100 cubic centimeters of the sulphuric acid and 900 cubic centimeters of fuming nitric acid (each arsenic free), the reaction being allowed to take place in the cold after the addition of a few drops of this mixture. A rapid addition of acid will cause foaming, spattering, and charring. It is well to allow this mixture to stand half an hour if there are indications of a violent reaction. Color changes may take place in serum, clot, and spinal fluid. The entire mass is now placed on the water bath and allowed to digest. If there is no vigorous action, 7 cubic centimeters of acid may be slowly added. Upon further digestion a thick, oily liquid is obtained. If the above reaction is not carefully guided, there will be a loss of arsenic from excessive foaming, from spattering, or from a sudden charring of the whole mass, which may cause a loss of arsenic in the smoke evolved. It is found that

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10 to 12 cubic centimeters of this acid mixture will *apparently* destroy the organic matter in 20 cubic centimeters of blood. To this yellow oily material 15 grams of equal parts of a mixture of solid potassium and sodium nitrates are added in saturated aqueous solution. The alkali metals here unite with the arsenic while further oxidation of the blood takes place. This mixture is evaporated on the water bath and a yellow crystalline mass remains, which still contains traces of organic material. Equal parts of sodium and potassium nitrates are mixed and ground in a mortar. Ten grams of this mixture are fused in a platinum dish, and the yellow crystalline mass is slowly added to the fused salts.

Considerable care should be exercised at this stage of the analysis. Too rapid addition may cause charring, and hence a loss of arsenic, or, in the case of material containing much oil or fat, there will be a brownish froth formed which will creep over the sides of the dish. As low a temperature as possible is used at first; finally a free flame is applied, and the entire mass is fused. The fused mass is allowed to cool and it is then dissolved in water; after the addition of sulphuric acid, it is heated upon a water bath, when there is an evolution of nitrous fumes. By repeating this last step, practically all of the nitrates are removed.

The next step in the method consists in the adsorption of the arsenic by means of ferric hydroxide. The solution as obtained above is neutralized quite exactly with ammonia, as, in the course of these analyses, it was observed that an excess of ammonia interfered with adsorption. According to the theory of adsorption, an optimum hydrogen ion concentration is required for adsorption; i. e., there is an optimum condition of surface affinity in the exchange of electrical charges. Exact electrometrical measurements should be made, so as to define the limits of hydrogen ion concentration within which adsorption of the metal by another takes place in the conditions under observation. In carrying out this process three adsorptions were performed, by adding successive portions of 15, 10, and 5 cubic centimeters of ferric ammonium sulphate to the solution containing arsenic. The solution of iron alum is so prepared that 1 cubic centimeter contains 50 milligrams of ferric hydroxide. The exact amount of ammonia necessary to precipitate the ferric hydroxide is added to the solution while cold, for the reason that adsorption is aided by low temperatures. Two hundred and twenty-six grams of ferric ammonium sulphate, dissolved in water and made up to 1 liter, yield a solution satisfactory for this purpose. The second adsorption is carried out with the filtrate from the first procedure by using 10 cubic centimeters of iron solution. This is neutralized and treated as indicated above. The filtrate in this step is treated with 5 cubic

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obtained. However, at this point a little care in the manipulation is required to control the rate of evolution of the arsenuretted hydrogen, the decomposition of the gas, and the deposition of the metallic arsenic in a uniform and evenly spaced portion of the capillary, which is properly cooled.

A tenth normal solution of arsenious oxide is used as a starting point. The solution is accurately standardized just before using, and from this the other dilutions are obtained. The final dilution is so prepared that 1 cubic centimeter of arsenious acid solution contains 1 part per million of metallic arsenic. The solution is used soon after preparation, for the reason that there is some evidence that these dilute solutions are very unstable. Mirrors are prepared by using from 1 to 10 cubic centimeters of this solution and carrying out the Marsh-Berzelius procedure. These mirrors were compared with those which are obtained by using organic material (guinea pig blood) and the agreement was found to be good. These results indicated that the method of destroying the organic material was reasonably good, and that the loss, if any, was very small. The mirrors were sealed off in an atmosphere of hydrogen and kept in the dark. From time to time mirrors from the unknown materials were compared with the standards. In the lower range of the scale it seemed possible to detect differences of less than 1 part per million, but since the personal equation may vary from day to day no attempt was made to pursue the matter further. The method is obviously a relative one and the readings were averaged; thus, a

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...ble mirror is formed, it is safe to say that ...wing plate. If at the end of ...and sulphuric acid will cause no difficulty by yielding a ...r in this interval.

...sample to be examined is carefully weighed and transferred ...porcelain casserole of suitable capacity. The fluid is then ...d with 7 cubic centimeters of nitrosulphuric acid mixture ...g the acid to drop in very gradually. In case of foaming ...lency toward charring the addition of acid is stopped until ...lent reaction has subsided. The mixture is digested on the ...ath until the material has a yellow oily appearance. Seven ...ntimeters of acids is usually sufficient to destroy at least ...s of fluid. The addition of a saturated solution of potas- ...l sodium nitrate is now carried out. The scheme employed ...ntrol method is now carried out. In making the Marsh ...tion it was found suitable to make up all the solutions ...bic centimeters and then use an aliquot (usually 10 cubic ...rs) to get an idea of the amount of arsenic present. This ...y step was followed by duplicate determinations which ...ared with the 10 standards. The results were expressed ...rts per million or in milligrams per 100 grams of material. ...s used in these investigations usually weighed between ...rams. These amounts were sufficiently large for dupli- ...inations, but the application of this method should ...d by the conditions.

...—A brief description of the apparatus follows: A ...venient size for the work in question is selected. It is ...a good hard glass bottle of about 300 cubic centimeters

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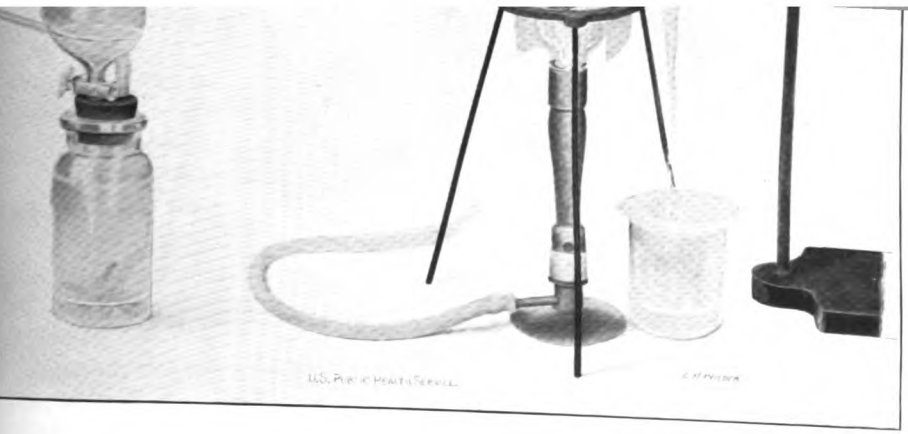

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cubic centimeters. In this manner mirrors are obtained representing aliquot portions of the material to be tested, and these in turn are compared with the standard mirrors. The amount may then be expressed in milligrams or parts per million.

For the benefit of bacteriologists and medical men it has been suggested that an explanation be made to show the relation of weights and parts per million. A tenth normal solution of arsenic trioxide contains $4\frac{95}{100}$ grams of arsenic trioxide, but since the solution may be a trifle weak, or strong, the volumetric correction factor must be applied. By making the necessary dilutions a solution is obtained which contains 0.000001 gram of metallic arsenic in each cubic centimeter. Now use 1, 2, 3, 4, etc., cubic centimeters of this solution and the mirrors obtained in this manner will contain 0.000001, 0.000002, etc. grams of metallic arsenic. Taking into consideration the aliquot portion and the weight of the sample, the result will then be expressed in parts per million of metallic arsenic, or the results may be expressed in per cent, since the results are first obtained in terms of grams of arsenic. One precaution should be emphasized and that is to avoid the error of dilution, which is multiplicative, and in every case to use large quantities which will materially reduce this error. By moving the decimal point one place to the left in the tables the results will be expressed in parts per million.

The gaseous compounds which may be formed in the generator are H_2S, H_2Se, H_2Te, H_3P, H_3Sb, H_3As. These are all disposed of during the destruction of the organic matter, with the exception of H_2S, which is removed as described above. The garlic-like odor is readily detected by the sense of smell, and amounts as small as 1 or 2 parts in 10,000,000 can be detected. This odor will assist quite readily in determining the rate of evolution. It is possible to lose considerable arsenic in this manner unless the evolution of hydrogen gas is carefully controlled. The accompanying plate shows the manner in which the material is treated by the Marsh method.

The following tables show the amounts of arsenic which were found in blood clot, blood serum, and spinal fluid obtained after the administration of arsenobenzol, salvarsan, and neosalvarsan to patients having tabes dorsalis. The clinical side of these cases is not discussed in connection with this paper, which presents only the chemical findings observed at different intervals after administration. The clinical work was carried on by Dr. J. H. Barbat, whose discussion can be found in the references given in the bibliography.

In years to come Liberty Loan securities will be harder to get and higher in price.

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Date.	Patient.	Drug.	Amount of drug in gm.	Specimen.	Time obtained after administration of drug.	Arsenic content in mg. per 100 gms. of specimen.
Nov. 18, 1916	Mrs. A. C., carcinoma.	Salvarsan	0.5	Blood: A. Serum	24 hours	A. 0.200
				Blood: B. Clot	24 hours	B. 0.220
Nov. 24, 1915	Lett. Gen. Hosp.	Neosalvarsan	0.9	Blood: A. Serum	1 hour	A. 0.400
				Blood: B. Clot	1 hour	B. 0.320
Nov. 24, 1915	Lett. Gen. Hosp.	Salvarsan	0.6	Blood: A. Serum	1 hour	A. 1.700
				Blood: B. Clot	1 hour	B. 0.100
Dec. 1, 1915	Lett. Gen. Hosp.	Salvarsan	0.6	Blood: A. Serum	1 hour	A. 0.500
				Blood: B. Clot	1 hour	B. 0.300
Jan. 15, 1916	C. D. S., tabes	Neosalvarsan	0.9	Spinal fluid	48 hours	0.025
Mar. 8, 1916	R. H., tabes	Arsenobenzol	0.4	Blood: Serum	1 hour	A. 0.700
				Blood: Clot		B. 0.050
				Spinal fluid: First	30 minutes	D. Trace
				Spinal fluid: Second	24 hours	C. 0.277
Mar. 24, 1916	R. H.	Arsenobenzol	0.4	Spinal fluid: A	Immediately	A. Trace.
				Spinal fluid: B	24 hours	B. 0.021
Mar. 8, 1916	S. O., tabes	Arsenobenzol	0.4	Blood: A. Serum	1 hour	A. 0.900
				Blood: B. Clot		B. 0.100
				Spinal fluid: C. First	30 minutes	C. 0.013
				Spinal fluid: D. Second	24 hours	D. 0.054
Mar. 24, 1916	S. O.	Arsenobenzol	0.4	Spinal fluid: A	Taken immediately.	A. 0.021
				Spinal fluid: B	24 hours	B. 0.039
Apr. 4, 1916	G. S.	Arsenobenzol	0.4	Spinal fluid: A	½ hour	A. 0.008
				Spinal fluid: B	24 hours	B. 0.008
Mar. 8, 1916	G. S.	Arsenobenzol	0.4	Blood: A. Serum	1 hour	A. 1.000
				Blood: B. Clot		B. 0.200
				Spinal fluid: C. First	30 minutes	C. Trace.
				Spinal fluid: D. Second	24 hours	D. 0.046
Apr. 18, 1916	G. S.	Arsenobenzol	0.4	Spinal fluid: A	½ hour	A. 0.009
				Spinal fluid: B	24 hours	B. 0.010
May 3, 1916	G. S.	Arsenobenzol		Spinal fluid	½ hour	Trace.
Mar. 14, 1916	Mc.	Arsenobenzol	0.4	Blood: A. Serum		A. 0.800
				Blood: B. Clot		B. 0.300
				Spinal fluid: C. First		C. 0.028
				Spinal fluid: D. Second		D. 0.025
Mar. 29, 1916	Mc.	Arsenobenzol	0.4	Spinal: A	½ hour	A. Trace.
				Spinal: B	24 hours	B. 0.010
Mar. 15, 1916	C. L. C.	Arsenobenzol	0.4	Blood: A	1 hour	A. 0.800
				Blood: B	1 hour	B. 0.400
				Spinal fluid: C	30 minutes	C. ....
				Spinal fluid: D	24 hours	D. 0.060
Mar. 29, 1916	C. L. C.	Arsenobenzol	0.4	Spinal fluid: A	½ hour	A. 0.003
				Spinal fluid: B	24 hours	B. 0.010
Apr. 12, 1916	C. L. C.	Arsenobenzol	0.6	Spinal fluid: A	½ hour	A. Trace
				Spinal fluid: B	24 hours	B. 0.005
Apr. 25, 1916	C. L. C.	Arsenobenzol	0.6	Spinal fluid: A	½ hour	A. Trace
				Spinal fluid: B	24 hours	B. 0.015
Mar. 24, 1916	B. D.	Arsenobenzol	0.4	Spinal fluid: A	Immediately	A. 0.020
				Spinal fluid: B	24 hours	B. 0.040
Apr. 4, 1916	B. D.	Arsenobenzol	0.4	Spinal fluid: A	½ hour	A. ....
				Spinal fluid: B	24 hours	B. 0.008
Apr. 18, 1916	B. D.	Arsenobenzol	0.4	Spinal fluid: A	½ hour	A. 0.004
				Spinal fluid: B	24 hours	B. 0.004
May 3, 1916	B. D.	Arsenobenzol	0.6	Spinal fluid: A	½ hour	A. Trace
				Spinal fluid: B	48 hours	B. 0.011
Apr. 4, 1916	R. H.	Arsenobenzol	0.4	Spinal fluid: A	½ hour	A. ....
				Spinal fluid: B	24 hours	B. ....
Apr. 18, 1916	R. H.	Arsenobenzol	0.6	Spinal fluid: A	½ hour	A. ....
				Spinal fluid: B	24 hours	B. Trace.
May 3, 1916	R. H.	Arsenobenzol	0.6	Spinal fluid: A	Immediately	A. ....
				Spinal fluid: B	48 hours	B. 0.010
Mar. 8, 1916	P. C., tabes	Arsenobenzol	0.4	Blood: A. Serum	1 hour	A. 0.600
				Blood: B. Clot	1 hour	B. 0.200
				Spinal fluid: C. 1st	30 minutes	D. 0.042
				Spinal fluid: D. 2nd	24 hours	C. 0.236
Mar. 24, 1916	P. C.	Arsenobenzol	0.4	Spinal fluid: A	Immediately	A. ....
				Spinal fluid: B	24 hours	B. 0.054
Apr. 4, 1916	P. C.	Arsenobenzol	0.4	Spinal fluid: A	½ hour	....
				Spinal fluid: B	24 hours	0.060
Apr. 18, 1916	P. C.	Arsenobenzol	0.6	Spinal fluid: A	½ hour	....
				Spinal fluid: B	24 hours	0.026
May 3, 1916	P. C.	Arsenobenzol	0.6	Spinal fluid: A	½ hour	0.003
				Spinal fluid: B	48 hours	0.004

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Summary.—This method, essentially a modification of the Lockemann method, is applicable for the determination of small amounts of arsenic in organic material. It gives excellent results when applied to urine, blood, serum, etc.

The method gives best results when applied to samples or aliquots containing 1 to 7 parts per million.

All samples should be weighed, rather than measured, when analysis is to be carried out.

The amount of arsenic found in these fluids was largest in the serum and least in the spinal fluid.

Barbat (1918) draws the following conclusions: "Analyses showed that the blood serum contained more than five times as much arsenic as the clot contained and that it averaged only about 8 parts per million. This fact proved that within half an hour after the administration of 0.4 gram of salvarsan 75 per cent is fixed in the body cells. The second portion of spinal fluid, which was withdrawn immediately after the administration of the salvarsan, showed 31 per cent arsenic free and 27 per cent with a trace, while 42 per cent gave an average of 0.2 part per million. The spinal fluid withdrawn 24 hours later showed one case out of 26 arsenic free, two cases with a trace, and an average of 0.25 part per million in the remaining 23 cases. These figures would indicate that arsenic can be made to pass into the spinal fluid in more than 96 per cent of patients suffering from tabes or paresis by the technic which I have described."

Strictly speaking, the preceding tables show the absorption of arsenic after the administration of arsenobenzol and do not give a fair comparison with salvarsan. Chemically, salvarsan is a distinct type of a generic nucleus known as 3, 3′-Diamino-4, 4′-Dioxy-Arsenobenzene Dihydrochloride. The arsenobenzene used in these administrations has not been definitely identified. The physical properties are somewhat different from salvarsan. The arsenic content is also between 1 and 2 per cent lower.

[NOTE.—This work was carried out in the Division of Pharmacology and the author wishes to express appreciation to Prof. Carl Voegtlin for suggestions and cooperation.]

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HOSPITALS AND DISPENSARIES FOR FREE TREATMENT OF VENEREAL DISEASES.

In response to repeated requests addressed to the Public Health Service for a list of hospitals and dispensaries where those infected with venereal disease may secure treatment free of charge, the following list of such places has been compiled:

Alabama:

Anniston—Venereal Disease Clinic, Smith Building.
Huntsville—Venereal Disease Clinic, Huntsville City Hospital.
Mobile—Venereal Disease Clinic, in city jail building.
Montgomery—Venereal Disease Clinic, Room 205, Bell Building.
Sheffield—Venereal Disease Clinic, Nitrate Plant No. 2.

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Arkansas:
Little Rock—Venereal Disease Clinic, 604 East Second Street.
Hot Springs—Leo N. Levi Memorial Hospital, Prospect Avenue and Quapaw Street.
California:
Berkeley—Berkeley Dispensary, 830 University Hospital.
Fresno—
Fresno City Clinic, City Emergency Hospital.
County Hospital Clinic, Ventura Avenue.
Los Angeles—
Boyle Avenue Dispensary, Boyle and Michigan Avenues.
Los Angeles County Hospital Clinic, 1100 Mission Road.
Los Angeles Municipal Clinic, Temple Block.
Selwyn Emmett Graves Memorial Dispensary, 737 North Broadway.
Oakland—Clinic of Oakland College of Medicine and Surgery, Thirty-first and Grove Streets.
Pasadena—Pasadena Dispensary, Congress Street near Fair Oaks Avenue.
Sacramento—Receiving Hospital and City Dispensary, Sacramento.
San Francisco—
University of California Hospital (Out-patient Department), Third and Parnassus Avenues.
College of Physicians and Surgeons, 344 Fourteenth Street.
Children's Hospital Dispensary, 3700 California Street.
San Francisco Hospital, Twenty-second and Potrero Avenue.
Polyclinic Hospital and Post Graduate College, 1535 Jackson Street.
Stanford Free Clinic, Sacramento and Webster Streets.
San Francisco Municipal Clinic, 1085 Mission Street.
Santa Barbara—Cottage Dispensary, Fourth Avenue and Santa Barbara Street.
Stockton—City Clinic, Mail Building.
San Diego—County Dispensary, Courthouse.
San Bernardino—County Clinic, San Bernardino.
San Jose—Good Cheer Club Clinic, Porter Building, Second and Santa Clara Streets.
West Orange—Orange County Hospital, West Orange.
Connecticut:
Bridgeport—Municipal Clinic, Health and Charity Building, Washington and Madison Streets.
Hartford—Municipal Dispensary, 56 Winthrop Avenue.
New Haven—Municipal Clinic, Dispensary Building, Congress and Cedar Streets.
Waterbury—Municipal Clinic, Waterbury.
Colorado:
Denver—
Venereal Disease Clinic, Dispensary Building, 1307 Welton Street.
County Hospital, West Sixth Avenue and Cherokee Street.
Delaware:
Wilmington—Venereal Disease Clinic, Fourteenth and Washington Streets.
District of Columbia:
Washington—Venereal Disease Clinic, Municipal Building, 405 Fifteenth Street NW.
Florida:
Arcadia—Venereal Disease Clinic, National Bank Building, 114–115 De Soto Street.
Jacksonville—Clinic, 216 West Adams Street.

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Florida—Continued.
Key West—
Clinic, Key West.
Mercedes Hospital, Key West.
Miami—Clinic, Old City Hospital, Fourth Avenue.
Pensacola—Clinic, Commandancia and Zargoza Streets.
Raiford—Clinic, State Prison Farm.
Tampa—Clinic, ground floor, City Hall.
Georgia:
Albany—Clinic, Albany.
Americus—Clinic, Americus.
Athens—Clinic, Athens.
Atlanta—Venereal Disease Clinic, Rhoder Building.
Augusta—Venereal Disease Clinic, Medical College.
Brunswick—Venereal Disease Clinic, Brunswick.
Columbus—Venereal Disease Clinic, City Hospital, 721 Fifteenth Street.
Macon—Venereal Disease Clinic, Macon Hospital, 820 Pine Street.
Savannah—Venereal Disease Clinic, United States Marine Hospital.
Rome—Clinic, Rome.
Illinois:
Chicago—
Red League Dispensary, 118 West Grand Avenue.
Central Free Dispensary, 5744-30 Stony Island Avenue.
Northwestern University Hospital, 432 South Lincoln Street.
Venereal Disease Clinic, United States Marine Hospital, 4141 Clarendon Avenue.
East St. Louis—Social Hygiene Clinic, basement of City Hall.
Indiana:
Evansville—Venereal Disease Clinic, county courthouse.
Indianapolis—
Clinic, Indiana University Medical College Building, Senate and Market Streets.
Robert W. Long Hospital, 1076 West Michigan Street.
Muncie—Clinic, Muncie.
Anderson—Clinic, Anderson.
Iowa:
Carroll—Venereal Disease Clinic, Clark Street.
Clinton—Clinic, Agatha Hospital.
Council Bluffs—Clinic, 303 Rogers Building.
Davenport—Clinic, Davenport.
Des Moines—Clinic, 406 Center Street.
Iowa City—Clinic, Iowa State University.
Marshalltown—Venereal Disease Clinic, Masonic Temple, First and Church Streets.
Sioux City—Venereal Disease Clinic, 210 New Davidson Building.
Waterloo—Venereal Disease Clinic, 618 Blacks Building.
Kansas:
Leavenworth—Venereal Disease Clinic, Post Office Building.
Rosedale—Bell Memorial Hospital (Out-patient Department), University of Kansas.
Wichita—Clinic, City Hall.

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Kentucky:
Louisville—
City Hospital, Preston and Chestnut Streets.
Louisville Workhouse, Third and Shipp Streets.
Jefferson County Jail, Louisville.
St. Xaviers, Twenty-third and Bank Streets.
Union Gospel Mission, 612 West Jefferson Street.
Louisiana:
Alexandria—Laboratory and Clinic, Room 309, Commercial Bank Building.
Monroe—Clinic, St. Francis Sanitarium, Jackson and Wood Streets.
New Orleans—
Clinic, Charity Hospital, Tulane Avenue and Villere Street.
Clinic, Touro Infirmary, 3516 Prytania Street.
Presbyterian Hospital of New Orleans, 718 Carondelet Street.
Shreveport—Charity Hospital, 1240 Texas Avenue.
Missouri:
Kansas City—Venereal Disease Clinic, Sixth and Walnut Streets.
Maine:
Augusta—Health Center, 219 Water Street.
Bangor—Eastern Maine General Hospital (Out-patient Department), State Street.
Portland—Maine Eye and Ear Infirmary, 188 State Street.
Maryland:
Baltimore—
Johns Hopkins Dispensary, Monument Street and Hopkins Avenue.
Mercy Hospital Dispensary, Calvert and Saratoga Streets.
University of Maryland Dispensary, Lombard and Green Streets.
Maryland General Hospital Dispensary, Linden Avenue and Madison Street.
Cumberland—Clinic, City Hall.
Massachusetts:
Attleboro—Sturdy Memorial Hospital, 211 Park Street.
Boston—
Massachusetts General Hospital, Blossom Street.
Massachusetts Homeopathic Hospital, 82 East Concord Street.
Boston Dispensary, 25 Bennet Street.
Brockton—Brockton City Hospital, 680 Center Street.
Fall River—City Hospital, Stanley Street.
Haverhill—Hale Hospital Clinic, Buttonwood Avenue.
Fitchburg—Board of Health Clinic, Fitchburg.
Lawrence—Board of Health Clinic, 33 Jackson Street.
Lowell—Corporation Hospital, Merrimack Street.
Lynn—Lynn Hospital, 206 Lewis Street.
New Bedford—Board of Health Clinic, New Bedford.
Pittsfield—House of Mercy, 741 North Street.
Salem—Salem Hospital, 31 Charter Street.
Worcester—City Hospital, Jacques Avenue, King and Queen Streets.
Michigan:
Battle Creek—Venereal Disease Clinic, City Hall.
Minnesota:
Duluth—Dispensary, St. Marys Hospital, Third Street and Fifth Avenue.
Minneapolis—
University Hospital Dispensary, corner Washington and Union Streets.
Clinic, Minneapolis Courthouse.
St. Paul—St. Paul Dispensary, 294 West Ninth Street.

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Mississippi:
Hattiesburg—Venereal Disease Clinic, Main Street.
Laurel—Venereal Disease Clinic, Southern Mississippi Hospital.
Montana:
Billings—Clinic, Babcock Theater Building.
Butte—Clinic, Phoenix Building.
Nebraska:
Omaha—
Clinic, Detention Home, county jail.
Creighton Medical College Clinic, Fourteenth and Davenport Streets.
University of Nebraska Clinic, Forty-second and Dewey Avenue.
New Hampshire:
Manchester—Clinic, Isolation Hospital.
New York:
Albany—Clinic, Albany.
Auburn—Auburn Prison Clinic, Auburn.
Binghamton—Clinic, 71-73 Collier Street.
Buffalo—
Municipal Hospital, 770 East Ferry Street.
Health Center No. 5, 51 Court Street.
Ithaca—Dr. Dumond's Office, 125 Farm Street
Jamestown—Venereal Disease Clinic, 507 Washington Street.
Niagara Falls—Clinic, 398 Pine Avenue.
Rochester—Clinic, Rochester Health Bureau.
Rockville Center—Clinic, Rockville Center.
Rome—Venereal Disease Clinic, East Dominick Street.
Schenectady—Public Health Center, 404 Union Street.
Syracuse—Syracuse Free Dispensary, 610 East Fayette Street.
Troy—Clinic, Samaritan Hospital, Peoples and Burdette Avenue.
Utica—Free Dispensary, 224 Mary Street.
Yonkers—Public Health Clinic, City Hall Building.
Brooklyn—
Jewish Hospital, Prospect Place.
Polhemus Memorial Clinic, Henry and Amity Streets.
Greenpoint Hospital, Kingsland and Bullion Streets.
New York City—
New York Skin and Cancer Hospital, Second Avenue and Nineteenth Street.
New York Skin and Cancer Hospital (Out-patient Department No. 1), 243 Barge Office.
New York Skin and Cancer Hospital (Out-patient Department No. 2), Second Avenue and Nineteenth Street.
Vanderbilt Clinic, Amsterdam Avenue and Sixtieth Street.
Public Health Service Clinic, 313 East Nineteenth Street.
New York Postgraduate Hospital, Second Avenue and Twentieth Street.
New York Hospital Dispensary, 8 West Sixteenth Street.
West Side German Dispensary, 328 West Forty-second Street.
Beth Israel Hospital, 70 Jefferson Street.
St. Luke's Hospital, Amsterdam Avenue and One hundred and thirteenth Street.
Cornel Medical College Dispensary, First Avenue and Twenty-eighth Street.
Lenox Hill Dispensary, Park Avenue and Seventy-seventh Street.
Lebanon Hospital, Westchester and Cauldwell Avenues (Bronx).
St. Mark's Hospital, 177 Second Avenue.

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New York—Continued.
New York City—Continued.
Mount Sinai Hospital, Fifth Avenue and One hundredth Street.
French Hospital, 450 West Thirty-fourth Street.
St. Bartholomew's Hospital Clinic, 215 East Forty-second Street.
Wykcoff Heights Hospital, New York City.
Broad Street Hospital, Broad Street.
Sydenham Hospital, 331 East One hundred and sixteenth Street.
Bellevue Hospital, First Avenue and Twenty-sixth Street.
DeMilt Dispensary, New York City.
Good Samaritan Dispensary, foot of East Ninetieth Street.
Stuyvesant Clinic, New York City.
Fordham Hospital, Southern Boulevard and Croton Avenue.
Roosevelt Hospital, 428 West Fifty-ninth Street.
Harlem Hospital, One hundred and thirty-sixth Street and Lenox Avenue.
Flower Hospital, 450 East Sixty-fourth Street.
Seamen's Church Institute, 25 South Street.
New Jersey:
Bayonne—Clinic, 12 East Thirtieth Street.
Camden—Cooper Hospital Clinic, Fifth and Benson Streets.
Jersey City—Clinic, Municipal Building, Baldwin Avenue.
Newark—City Dispensary, Plane and Williams Streets.
Paterson—Clinic, Paterson.
Plainfield—Clinic, Plainfield.
Trenton—City Dispensary, City Hall.
North Carolina:
Asheville—Clinic, Asheville.
Charlotte—Clinic, Realty Building.
Wilmington—Clinic, Wilmington.
Winston-Salem—Clinic, Winston-Salem.
Ohio:
Ashtabula—Clinic, Ashtabula.
Akron—Clinic, 50 East Buchtel Avenue.
Cincinnati—
Clinic, 514 Main Street.
Clinic, Cincinnati General Hospital.
Cleveland—
Cleveland City Hospital, Scranton Road.
Lakeside Hospital, 1235 Lakeside Avenue.
Mount Sinai Hospital, 1800 East One hundred and fifth Street.
Chillicothe—Venereal Disease Clinic, 121 Main Street.
Dayton—Department of Health Clinic, Dayton.
Lorain—Venereal Disease Clinic, St. Joseph's Hospital.
Columbus—Venereal Disease Clinic, 112 East Broad Street.
Portsmouth—Venereal Disease Clinic, Portsmouth.
Springfield—Department of Health Clinic, Springfield.
Toledo—Clinic, Lafayette and Superior Avenue.
Youngstown—Youngstown City Hospital, Youngstown.
Oklahoma:
Lawton—Venereal Disease Clinic, 329½ C Avenue.
Oklahoma City—Emergency Hospital, Oklahoma City.
Oregon:
Portland—Clinic, Fourth and Jefferson Streets.

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Pennsylvania:
Pittsburgh—
Allegheny General Hospital Dispensary, 110 East Stockton Avenue.
Children's Hospital Dispensary, Forbes Street and McDevitt Place.
Elizabeth Steel Magee Hospital Dispensary, Forbes and Halket Streets.
Eye and Ear Hospital Dispensary, 1945 Fifth Avenue.
Mercy Hospital Dispensary, Pride and Locust Streets.
Montefiore Hospital Dispensary, 3000 Center Avenue.
Passavant Hospital Dispensary, Miller and Reed Streets.
Presbyterian Hospital Dispensary, Montgomery and Sherman Avenues.
South Side Hospital Dispensary, South Twentieth, Mary, and Jane Streets.
St. Francis Hospital Dispensary, Forty-fifth Street.
St. John's General Hospital Dispensary, 3339 McClure Avenue.
St. Joseph's Hospital Dispensary, 2117 Carson Street.
Homestead—The Homestead Hospital Dispensary, Homestead.
Bellevue—Suburban General Hospital Dispensary, Bellevue.
Beaver Falls—Providence Hospital Dispensary, Beaver Falls.
Reading—
Homeopathic Hospital Dispensary, 135 North Sixth Street.
Reading Hospital Dispensary, Front and Spring Streets.
St. Joseph's Hospital Dispensary, Reading.
Altoona—
Mercy Hospital Dispensary, 2601 Eighth Avenue.
Altoona Hospital Dispensary, Altoona.
Johnstown—Conemaugh Valley Memorial Dispensary, Johnstown.
West Chester—Homeopathic Hospital of Chester County, West Chester.
Clearfield—Clearfield Hospital Dispensary, Clearfield.
Berwick—Berwick Hospital Dispensary, Berwick.
Harrisburg—
Harrisburg Hospital Dispensary, Front and Mulberry Streets.
Harrisburg Polyclinic Hospital Dispensary, Front and Harris Streets.
Chester—
Chester Hospital Dispensary, Ninth and Barclay Streets.
J. Lewis Crozier Homeopathic Hospital Dispensary, Chester.
Ridley Park—Taylor Hospital Dispensary, Ridley Park.
Erie—Hamot Hospital Dispensary, Second and State Streets.
Indiana—Indiana Hospital Dispensary, Indiana.
Scranton—
Hahnemann Hospital Dispensary, Scranton.
State Hospital Dispensary, Franklin Avenue and Mulberry Streets.
Lancaster—St. Joseph's Hospital Dispensary, Lancaster.
Allentown—Allentown Hospital Dispensary, Allentown.
Wilkes-Barre—
Mercy Hospital Dispensary, Wilkes-Barre.
City Hospital Dispensary, North River and Auburn Streets.
Wyoming Valley Homeopathic Hospital Dispensary, 149 Dana Street.
Nanticoke—State Hospital of Nanticoke Dispensary, Nanticoke.
Bryn Mawr—Bryn Mawr Hospital Dispensary, Bryn Mawr.
Pottstown—Pottstown Hospital Dispensary, Pottstown.
Danville—Geissinger Memorial Hospital Dispensary, Danville.
Shamokin—State Hospital Dispensary, Shamokin.
Philadelphia—
American Oncologic Hospital Dispensary, Thirty-third Street and Powelton Avenue.
Chestnut Hill Hospital Dispensary, 8815 Germantown, Chestnut Hill.

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Pennsylvania—Continued.
Philadelphia—Continued.
Frankford Hospital Dispensary, Frankford Avenue and Wakeling Street.
Garrettson Hospital Dispensary, Eighteenth and Hamilton Streets.
Germantown Hospital Dispensary, Penn Street near Chew.
Hahnemann Hospital Dispensary, Fifteenth Street above Race.
Hospital of the Protestant Episcopal Church Dispensary, Front Street and Lehigh Avenue.
Howard Hospital Dispensary, Broad and Catherine Streets.
Jefferson Hospital Dispensary, Tenth and Sansom Streets.
Lankenau Hospital Dispensary, Philadelphia.
Mercy Hospital Dispensary, Seventeenth and Fitzwater Streets.
Methodist Episcopal Hospital Dispensary, South Broad and Wolf Streets.
Mount Sinai Hospital Dispensary, 1429 South Fifth Street.
Northwestern General Hospital Dispensary, 2019 North Twenty-second Street.
Presbyterian Hospital Dispensary, 51 North Thirty-ninth Street.
Samaritan Hospital Dispensary, Broad and Ontario Streets.
Stetson Hospital Dispensary, 1745 North Fourth Street.
St. Agnes Hospital Dispensary, 1900 South Broad Street.
St. Christopher's Hospital Dispensary, Lawrence and Huntingdon Streets.
St. Joseph's Hospital Dispensary, Sixteenth Street and Girard Avenue.
St. Luke's Hospital Dispensary, 4414 North Broad Street.
St. Mary's Hospital Dispensary, Frankford Avenue and Palmer Street.
St. Timothy's Memorial Hospital Dispensary, Ridge and Jamestown Avenues.
University Hospital Dispensary, Philadelphia.
Polyclinic Hospital, 1818 Lombard Street.
West Philadelphia Hospital for Women, 4035 Parish Street.
Wills Hospital Dispensary, 1810 Race Street.
Woman's College Hospital Dispensary, North College Avenue and Twenty-second Street.
Women's Homeopathic Hospital Dispensary, Twentieth Street and Susquehanna Avenue.
Pottsville—The Pottsville Hospital Dispensary, Pottsville.
Windber—Windber Hospital Dispensary, Windber.
Susquehanna—The Simon H. Barnes Memorial Hospital Dispensary, Susquehanna.
Mount Pleasant—Mount Pleasant Memorial Hospital Dispensary, Mount Pleasant.
York—York Hospital Dispensary, York.
Rhode Island:
Providence—
Providence City Hospital, Eaton Street.
Rhode Island Hospital Clinic, 503 Eddy Street.
St. Joseph's Hospital, Corner Broadway and Plenty Streets.
Pawtucket—Memorial Hospital Clinic, Prospect Street.
Woonsocket—Woonsocket Hospital, 115 Cass Street.
South Carolina:
Charleston—Roper Hospital, Lucas and Calhoun Streets.
Columbia—Venereal Disease Clinic, Hampton Avenue.
Greenville—Venereal Disease Clinic, North Main Street.
Spartanburg—Venereal Disease Clinic, 148 West Main Street.
Florence—Venereal Disease Clinic, Florence.
South Dakota:
Aberdeen—Venereal Disease Clinic, Aberdeen.

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Tennessee:
Chattanooga—
Clinic for Males, county courthouse.
Clinic for Females, Municipal Building.
Subclinic No. 1, Twenty-sixth and Sidney Streets.
Subclinic No. 2, 612 West Main Street.
Texas:
Austin—Detention Hospital Clinic, between Fourteenth and Fifteenth Streets.
Dallas—Clinic, Emergency Department, City Hall.
El Paso—
Venereal Disease Clinic, County Courthouse.
City Hospital, El Paso.
Fort Worth—
Venereal Disease Clinic, Fifth and Calhoun Streets.
City Detention Hospital, Fort Worth.
Galveston—Clinic, Eighth and Market Streets.
Houston—Venereal Disease Clinic, 714½ Prairie Avenue.
San Antonio—Venereal Disease Clinic, 118 Dwyer Avenue.
Wichita Falls—Isolation Quarantine Hospital, Wichita Falls.
Vermont:
Burlington—Clinic, Public Dispensary.
Virginia:
Danville - Venereal Disease Clinic, Danville.
Lynchburg—City Laboratory, Lynchburg.
Petersburg—Venereal Disease Clinic, 310 North Sycamore Street.
Newport News—Venereal Disease Clinic, 225 Twenty-fifth Street.
Norfolk—Venereal Disease Clinic, Court and Cove Streets.
Richmond -
Venereal Disease Clinic, Twelfth and Clay Streets.
City Home Hospital, Hospital Street.
Washington:
Seattle—Clinic, Public Health Safety Building.
Spokane—City Free Clinic, City Hall.
West Virginia:
Beckley—Beckley Hospital, Beckley.
Bluefield -Bluefield Sanitarium, 204-212 Ramsey Street.
Davis -Alleghany Heights Hospital, Davis.
Charleston -Clinic, Room 401, Banking and Trust Building.
Elkins -Davis Memorial Hospital, Elkins.
Hinton -Hinton Hospital, Hinton.
Huntington -Chesapeake & Ohio Railway Hospital, Sixth Avenue and Eighteenth Street.
Marlinton -Marlinton General Hospital, Marlinton.
McKendree -Miners Hospital, No. 2, McKendree.
Welch—Welch Hospital, Welch.
Wheeling -Ohio Valley General Hospital, Eoff and Twentieth Streets.

List of Detention Hospitals or Detention Houses with Hospital Facilities for Venereally Infected Persons.

Alabama:
Anniston Detention Hospital, 1522 Glen Addie, Anniston.
Montgomery Detention Hospital, Upper Wetumpka Road, Montgomery.
Arkansas:
Little Rock Detention Hospital, 604 East Second Street, Little Rock.

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California:
Lou Felis Detention Hospital, Los Angeles.
Florida:
Duval County Isolation Hospital and Detention House, Jacksonville.
Georgia:
Augusta Detention Hospital, City Stockade, Augusta.
Atlanta Detention Hospital, DeKalb Avenue, Atlanta.
Detention Hospital, Pinecrest, Buckhead (near Atlanta).
Grady Memorial Hospital, 101 North Butler Street, Atlanta.
Iowa:
Council Bluffs Detention Home, 1820 West Broadway, Council Bluffs.
Marshalltown Detention Hospital, First and Church Streets, Marshalltown.
Sioux City Detention Hospital, Sawyers Hill, Sioux City.
Des Moines Detention Hospital, 406 Center Street, Des Moines.
Indiana:
Detention wards in City Hospital, Tenth and Locke Streets, Indianapolis.
Kansas:
Kansas Industrial Farm for Women, Lansing.
Detention Hospital for Men, Kansas State Penitentiary, Lansing.
Louisiana:
Alexandria Detention Hospital, Gumm Street, Alexandria.
Detention Hospital, St. Francis Sanitarium, Jackson and Wood Streets, Monroe, La.
Mississippi:
Hattiesburg Detention Hospital, Dewey Street, Hattiesburg.
Montana:
Billings Detention Home, 723 North Twenty-fourth Street, Billings.
New Jersey:
Newark Detention Hospital, City Hospital, Fairmont Avenue, Newark.
Detention Hospital, City Hospital, Baldwin Avenue, Jersey City.
Oregon:
"The Cedars" Detention Home, Sandy Road, Portland.
Ohio:
Detention Hospital, Ross County Infirmary, Chillicothe.
Dayton Detention Hospital, Dayton.
Akron Detention Hospital, 493 East Market Street, Akron.
Oklahoma:
Lawton Detention Hospital, City Fair Grounds, Lawton.
South Carolina:
Columbia House of Detention, Columbia.
Detention Home, 115 Library Street, Spartanburg.
Tennessee:
Chattanooga Detention Hospital, Chattanooga.
Memphis Detention Hospital, Dunlap Street and Madison Avenue, Memphis.
Texas:
El Paso Detention Hospital, county courthouse, El Paso.
Detention Hospital, Live Oak Farm, North Loop, San Antonio.
Houston City Farm, Houston.
Galveston Detention Hospital, Eighth and Market Streets, Galveston.
Austin Detention Hospital, between Fourteenth and Fifteenth Streets, Austin.
Virginia:
Newport News City Farm, Newport News.

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SUMMARY OF THE MARCH REPORT OF THE DIVISION OF VENEREAL DISEASES, PUBLIC HEALTH SERVICE.

Medical Activities.

There are approximately 250 clinics being operated by, or in conjunction with, the United States Public Health Service, Division of Venereal Diseases.

On account of delay in getting reports from the field the accompanying table covers the activities of only 33 of these clinics. This table shows that during the month there were 2,869 new cases of venereal diseases admitted, making a total of 11,931 patients under treatment. The average daily attendance during March was 47.9 as compared with 32.7 for the month of February.

Census of all patients under care of 33 of the clinics operated by, or in conjunction with, the U. S. Public Health Service, for the month of March, 1919.

Clinics.	Total patients.	Remaining at last report.	New patients admitted.	Discharged.		Discontinued treatment.		Remaining under treatment.		Number of clinic days.	Average daily attendance	
				As noninfectious but not cured.	As probably cured.	With permission.	Without permission.	In clinics.	In institutions		March	February.
Anniston, Ala.	103	83	20	.....	9	5	13	76	.....	26	16.0	14.3
Atlanta, Ga.	1,952	1,683	269	11	47	40	83	1,652	119	26	77.5	84.3
Chillicothe, Ohio.	60	30	30	.....	10	2	3	19	26	26	8.4	7.4
Columbia, S. C.	640	467	173	15	21	16	3	551	34	27	47.5	36.0
Council Bluffs, Iowa.	42	33	9	.....	4	4	4	26	4	.....	.....	7.9
Davenport, Iowa.	56	33	23	.....	.....	4	1	51	0	6	.....	8.1
Des Moines, Iowa.	306	244	62	5	46	5	13	228	8	26	28.4	45.2
Denver, Colo.	169	138	31	8	2	.....	.....	159	.....	13	37.1	28.9
East Chicago, Ind.[1]	2	.....	2	1	.....	.....	.....	1	.....	1	2.0	.....
El Paso, Tex.	512	432	80	.....	51	7	3	390	61	26	68.4	72.1
Evansville, Ind.	26	7	19	1	.....	1	.....	24	.....	7	8.6	1.7
Florence, S. C.	72	.....	72	.....	.....	.....	.....	55	17	14	5.1	.....
Galveston, Tex.	158	76	82	.....	9	33	6	110	.....	25	18.8	14.4
Greenville, S. C.	288	212	76	1	17	12	32	200	26	26	70.9	41.5
Houston, Tex.	868	723	145	.....	186	1	21	639	21	26	67.0	111.8
Indianapolis, Ind.	432	297	135	8	5	11	76	310	22	16	72.3	66.1
Kansas City, Mo.	104	29	75	.....	55	29	3	15	2	31	10.9	9.5
Leavenworth, Kans.	418	311	107	.....	95	8	19	83	207	31	123.3	108.4
Louisville, Ky.	1,468	1,153	315	.....	.....	250	106	1,025	87	26	166.3	197.8
Macon, Ga.	393	237	156	.....	29	57	61	237	9	26	43.7	33.4
Montgomery, Ala.	619	506	113	.....	6	16	8	575	14	26	73.3	67.4
Muncie, Ind.[1]	20	.....	20	.....	1	.....	.....	19	.....	3	11.6	.....
Newark, N. J.	53	11	42	.....	21	.....	.....	32	.....	30	30.0	31.0
New York, N. Y.	292	212	80	.....	20	24	14	234	.....	25	19.3	8.0
Norfolk, Va.	315	157	158	.....	65	113	9	109	19	26	39.9	41.8
Petersburg, Va.	297	267	29	12	7	32	.....	231	14	26	35.0	42.0
Pawtucket, R. I.	44	33	11	.....	1	4	13	26	.....	13	7.6	9.5
Providence, R. I.:												
No. 1.	648	589	59	.....	.....	12	23	613	.....	26	44.1	27.6
No. 2.	81	53	28	.....	1	1	.....	79	.....	27	6.5	8.4
Richmond, Va.	224	132	92	.....	12	.....	.....	205	7	26	45.0	36.0
San Antonio, Tex.	595	373	213	.....	61	143	38	322	22	22	63.9	60.3
Savannah, Ga.	558	454	104	.....	16	14	56	472	.....	6	32.0	27.0
Spartanburg, S. C.	126	87	39	.....	18	.....	19	63	26	26	38.0	40.5
Total.	11,931	9,062	2,869	62	815	844	627	8,837	745	687	47.9	32.7

[1] Clinics opened for the first time.

A large number of clinics have passed from the absolute control of the Government and the Red Cross to the control of the State and local health departments and are financed by the latter organizations, but remain indirectly under the supervision of the division through its

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State representatives. Conferences are encouraged with State boards of health officers, to be followed by a statement to the Public Health Service Bureau of proposed recommendations for future operations.

The following services were rendered by the nurses engaged in venereal-disease control in the extra-cantonment zones:

Number of clinics reporting	34
Number of nurses on duty	61
Number of social workers	27
Number of visits made by nurses	579
Number of visits made by social workers	622
Number of follow-up visits (home work)	140
Number of follow-up visits (delinquent patients)	948
Number of treatments administered to female patients	15,461
Number assisted at examination and consultation	1,475
Number of arsphenamine treatments given	4,842
Total number of treatments given	34,972
Total number examined	3,279

Educational Activities.

Requests for publications from individuals	4,369
Requests for publications from health officers, physicians, hospitals, nurses, civic organizations, city officials, libraries, editors, Y. M. C. A., and educators (campaign for churches closed)	3,303
Number of requests for publications referred to State boards of health	4,109
Publications purchased or reprinted by State boards of health (report not complete)	200,000
Publications distributed	942,702
Number of States which have purchased framed placards for railroad stations	24
Number of States organized to carry on campaign among boys	39
Number of articles published in magazines	13
Number of lectures, exhibitions of films, addresses and conferences (reports from the field not complete)	280
Additional pledges of cooperation received from druggists (report not complete)	2,896
Additional pledges of cooperation from physicians (report not complete)	10,271
Number of States equipped with full sets of venereal-disease pamphlets	33

Legislation.

Bills providing for appropriations for combating venereal disease have been passed in the following States:

Arizona	$4,500.00	South Dakota	$10,000.00
Arkansas	17,000.00	Texas (appropriation last year)	45,000.00
Delaware	2,500.00	Utah	8,120.00
Maine	8,000.00	Washington (venereal-disease control)	25,000.00
Montana	8,177.42	Washington (for women's reformatory)	150,000.00
Nebraska	25,925.50	West Virginia (annually)	7,000.00
New York	55,000.00	Wisconsin	50,000.00
North Dakota	12,548.48	Wyoming	4,000.00
Oklahoma	86,000.00		
Oregon	25,000.00		
South Carolina	10,000.00		

Mississippi, Kentucky, Louisiana, Maryland, and Virginia have no legislative session this year. The Georgia Legislature meets in June, 1919; the Florida Legislature convened April 8, 1919.

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The following bills on venereal diseases have been passed:

Alabama: Injunction and abatement act, ouster law, venereal disease-control act, venereal disease bar to marriage act, State board of control act.

Delaware: Injunction and abatement act, venereal disease-control act.

Montana: Venereal disease-control act.

Nebraska: Venereal disease-control act.

New York: Venereal disease-control act.

North Carolina: Vice repressive act, injunction and abatement act, venereal disease-control act.

Oregon: Venereal disease-control act.

South Carolina: Venereal disease-control act.

South Dakota: Venereal disease-control act.

Utah: Venereal disease-control act, act relating to control of venereal diseases in women's reformatories, act prohibiting sale of venereal disease drugs except on prescription of a physician.

Washington: Venereal disease-control act, act relating to control of venereal diseases in women's farms and reformatories.

Michigan: Venereally diseased persons barred from handling food.

The following States have laws prohibiting marriage on account of venereal disease: Maine, New Jersey, New York, Oklahoma, Oregon, Vermont, and Wisconsin.

THE NOTIFIABLE DISEASES.

PREVALENCE DURING 1917 IN CITIES OF 10,000 TO 100,000.

CEREBROSPINAL MENINGITIS, DIPHTHERIA, GONORRHEA, MALARIA, MEASLES, PELLAGRA, POLIOMYELITIS (INFANTILE PARALYSIS), RABIES IN ANIMALS, RABIES IN MAN, SCARLET FEVER, SMALLPOX, SYPHILIS, TUBERCULOSIS (PULMONARY), TUBERCULOSIS (ALL FORMS), AND TYPHOID FEVER—CASES AND DEATHS REPORTED, INDICATED CASE RATES PER 1,000 POPULATION, INDICATED FATALITY RATES PER 100 CASES.

The tables shown on the following pages were compiled from data furnished by health officers of cities of the United States in response to requests from the Public Health Service for information of the reported prevalence of disease during the calendar year 1917. These requests were sent to all cities of 10,000 population or over.

The data for cities of over 100,000 population have been published (Reprint from the Public Health Reports, No. 498). A similar publication for States, giving the reported cases and deaths by months, has been issued (Reprint 505).

The present article contains reports from cities of between 10,000 and 100,000 population which responded to the request for information. Many cities did not respond, and some stated frankly that the desired data were not available, as reports had not been received from physicians. It is believed that practically all cities are included which have records of morbidity from communicable diseases which are of value for statistical purposes.

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It will be noted that some of the cities are apparently much more successful in obtaining reports of the notifiable diseases than are others. This may be due to the greater activity of their health departments or to a greater interest in the public welfare on the part of their practicing physicians. That the health departments of certain cities are securing sufficiently complete information of the prevalence of preventable diseases to make possible their control is indicated in a number of instances by the large numbers of cases reported as compared with the numbers of deaths registered from the same causes.

In studying these tables it should be kept in mind that a relatively large number of reported cases of a communicable disease, as indicated by a high case rate (and more especially when accompanied by a relatively small number of deaths, as indicated by a low fatality rate) usually means that the health department of that city is active and that the cases of the disease are being well reported by the practicing physicians. It does not usually mean that the disease is more prevalent in that city than in other cities. A high fatality rate may mean that the disease was unusually virulent in a city, that the physicians did not treat the disease in that city with the success usual elsewhere, or that the practicing physicians did not report all of their cases to the health department. On the other hand, an unusually low fatality rate may be due to the fact that the disease in the city was unusually mild, that the physicians treated it with unusual success, that the practicing physicians reported their cases satisfactorily, or that the registration of deaths was incomplete, or the assignment of the causes of death inaccurate.

REPORTED PREVALENCE FOR THE YEAR 1917.

CEREBROSPINAL MENINGITIS.[1]

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Akron, Ohio	93,604	142	42	1.517	29.58
Alexandria, La	16,232	1	4	.....	.....
Alton, Ill	23,783	1	.....	.042	.....
Altoona, Pa	59,712	5	.....	.084	.....
Amarillo, Tex	20,882	6	6	.287	100.00
Amsterdam, N. Y	38,043	3	8	.....	.....
Anderson, Ind	24,230	4	.....	.165	.....
Appleton, Wis	18,005	2	2	.111	100.00
Ashtabula, Ohio	22,008	3	2	.136	66.67
Astoria, Oreg	10,487	4	4	.381	100.00
Atlantic City, N. J	59,515	3	2	.050	66.67
Attleboro, Mass	19,776	2	1	.101	50.00
Barberton, Ohio	14,187	5	4	.352	80.00
Battle Creek, Mich	30,159	2	2	.066	100.00
Bay City, Mich	48,390	2	9	.....	.....
Bayonne, N. J	72,204	3	.....	.042	.....
Beacon, N. Y	11,674	3	4	.....	.....
Beatrice, Nebr	10,437	2	2	.192	100.00
Beaumont, Tex	28,851	1	.....	.035	.....

[1] Cities in which no cases of this disease were reported are not included in this table.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

CEREBROSPINAL MENINGITIS—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Bellaire, Ohio	14,575	2	2	0.137	100.00
Belleville, N. J	12,797	4	3	.313	75.00
Berkeley, Calif	60,427	2	.....	.033	.....
Bessemer, Ala	17,156	5	1	.291	20.00
Bethlehem, Pa	14,353	2	.....	.139	.....
Beverly, Mass	23,128	7	2	.316	28.57
Billings, Mont	15,123	3	1	.198	33.33
Binghamton, N. Y	54,864	8	3	.146	37.50
Bloomfield, N. J	19,013	2	2	.105	100.00
Bradford, Pa	[1] 14,544	2	.....	.138	.....
Bridgeton, N. J	14,425	1	.....	.069	.....
Bristol, Conn	16,318	2	.....	.123	.....
Brockton, Mass	69,152	2	2	.029	100.00
Brookline, Mass	33,526	1	.....	.030	.....
Brunswick, Ga	10,984	1	1	.091	100.00
Burlington, Vt	21,802	1	1	.046	100.00
Butler, Pa	28,677	2	.....	.070	.....
Canton, Ohio	62,566	3	3	.048	100.00
Carnegie, Pa	11,963	3	.....	.251	.....
Cedar Rapids, Iowa	38,033	1	.....	.026	.....
Charleston, W. Va	31,060	2	1	.064	50.00
Chelsea, Mass	48,405	3	.....	.062	.....
Chester, Pa	41,887	8	4	.191	50.00
Chicago Heights, Ill	22,863	4	2	.175	50.00
Cicero, Ill	20,846	4	.....	.192	.....
Cleburne, Tex	12,553	1	1	.080	100.00
Cohoes, N. Y	25,292	1	8	.....	.....
Columbus, Ga	26,308	1	1	.038	100.00
Connellsville, Pa	15,876	2	2	.126	100.00
Corsicana, Tex	10,086	1	.....	.099	.....
Coshocton, Ohio	11,887	1	4	.....	.....
Council Bluffs, Iowa	31,[illegible]	4	3	.135	75.00
Cumberland, Md	28,686	1	1	.037	100.00
Cumberland, R. I	10,[illegible]	2	3	.....	.....
Davenport, Iowa	49,[illegible]	2	2	.040	100.00
Decatur, Ill	41,[illegible]	6	6	.145	100.00
Du Bois, Pa	14,[illegible]	2	.....	.133	.....
Dubuque, Iowa	40,[illegible]	15	.....	.374	.....
Duluth, Minn	97,077	23	14	.237	60.87
Dunkirk, N. Y	21,311	1	2	.....	.....
Dunmore, Pa	21,[illegible]	3	.....	.141	.....
East Chicago, Ind	30,[illegible]	4	4	.132	100.00
East Orange, N. J	43,761	3	1	.069	33.33
East St. Louis, Ill	77,312	3	20	.....	.....
Eau Claire, Wis	18,887	9	2	.477	22.22
Edwardsville, Pa	10,771	1	1	.093	100.00
Elizabeth, N. J	[illegible]	22	6	.248	27.27
Elmira, N. Y	[illegible]	1	1	.026	100.00
El Paso, Tex	69,[illegible]19	18	7	.259	38.89
Elwood, Ind	[1] 11,[illegible]	1	.....	.091	.....
Erie, Pa	76,[illegible]	6	3	.078	50.00
Escanaba, Mich	15,[illegible]	4	4	.252	100.00
Everett, Mass	40,100	1	.....	.025	.....
Everett, Wash	37,205	1	.....	.027	.....
Fairmont, W. Va	16,111	3	3	.186	100.00
Farrell, Pa	[1] 10,190	1	3	.....	.....
Flint, Mich	57,[illegible]	4	4	.070	100.00
Fond du Lac, Wis	21,[illegible]	2	2	.093	100.00
Fort Wayne, Ind	78,014	8	4	.103	50.00
Fostoria, Ohio	10,[illegible]	1	1	.091	100.00
Franklin, Pa	11,[illegible]	1	1	.087	100.00
Fremont, Ohio	11,[illegible]	1	1	.091	100.00
Galveston, Tex	42,[illegible]	3	1	.070	33.33
Gardner, Mass	17,534	1	.....	.057	.....
Gary, Ind	56,000	6	2	.107	33.33
Grand Forks, N. Dak	16,342	1	1	.061	100.00
Grand Island, Nebr	13,133	1	1	.076	100.00
Granite City, Ill	15,890	1	1	.063	100.00
Greenfield, Mass	12,251	1	.....	.082	.....
Greenville, S. C	18,574	1	.....	.054	.....
Greenwich, Conn	19,594	1	1	.051	100.00
Hackensack, N. J	17,412	4	3	.230	75.00
Hammond, Ind	27,016	1	5	.....	.....
Harrisburg, Pa	73,276	3	1	.041	33.33

[1] Population April 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

CEREBROSPINAL MENINGITIS—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Harrison, N. J.	17,345	1	.....	0.058	.....
Haverhill, Mass.	49,180	2	2	.041	100.00
Helena, Ark.	11,122	2	1	.180	50.00
Highland Park, Mich.	33,859	4	4	.118	100.00
Homestead, Pa.	23,071	2	.....	.087	.....
Hutchinson, Kans.	21,461	2	3	.....	.....
Independence, Kans.	15,111	3	1	.199	33.33
Iowa City, Iowa	11,626	1	1	.086	100.00
Ironwood, Mich.	15,095	2	2	.132	100.00
Irvington, N. J.	16,710	2	2	.120	100.00
Ishpeming, Mich.	[1] 12,448	1	1	.080	100.00
Jacksonville, Ill.	15,506	1	1	.064	100.00
Jamestown, N. Y.	37,431	2	2	.053	100.00
Joliet, Ill.	38,549	4	.....	.104	.....
Kewanee, Ill.	13,607	3	2	.220	66.67
Kokomo, Ind.	21,029	1	1	.046	100.00
Lakewood, Ohio.	23,813	1	1	.042	100.00
Lancaster, Pa.	51,437	1	1	.019	100.00
Laporte, Ind.	13,572	1	1	.074	100.00
La Salle, Ill.	12,332	7	4	.568	57.14
Leavenworth, Kans.	[1] 19,363	1	1	.052	100.00
Lebanon, Pa.	20,947	2	2	.095	100.00
Lexington, Ky.	41,997	1	7	.....	.....
Lima, Ohio.	37,145	2	2	.054	100.00
Lincoln, Nebr.	46,957	7	3	.149	42.86
Lorain, Ohio.	38,266	1	1	.026	100.00
Ludington, Mich.	10,566	1	1	.095	100.00
McAlester, Okla.	19,398	1	.....	.052	.....
McKees Rocks, Pa.	20,795	3	.....	.144	.....
Macon, Ga.	46,099	1	2	.....	.....
Malden, Mass.	52,243	2	1	.038	50.00
Manchester, Conn.	15,859	11	3	.694	27.27
Manchester, N. H.	79,607	8	.....	.100	.....
Manitowoc, Wis.	13,931	2	2	.144	100.00
Mansfield, Ohio.	23,051	1	1	.043	100.00
Marquette, Mich.	12,555	3	3	.239	100.00
Mason City, Iowa.	14,938	1	.....	.067	.....
Medford, Mass.	26,681	1	1	.037	100.00
Meriden, Conn.	29,431	1	.....	.034	.....
Michigan City, Ind.	21,913	1	.....	.046	.....
Middletown, N. Y.	15,890	1	1	.063	100.00
Middletown, Ohio.	16,384	3	2	.183	66.67
Milford, Mass.	14,280	2	1	.140	50.00
Millville, N. J.	13,813	1	4	.....	.....
Moline, Ill.	27,976	1	1	.036	100.00
Monroe, La.	13,698	1	.....	.073	.....
Montclair, N. J.	27,087	2	.....	.074	.....
Morgantown, W. Va.	14,444	2	2	.138	100.00
Muskegon, Mich.	27,434	3	3	.109	100.00
New Albany, Ind.	23,629	1	1	.042	100.00
New Britain, Conn.	55,385	19	10	.343	52.63
New Brunswick, N. J.	25,855	2	.....	.077	.....
New Castle, Pa.	41,915	5	1	.119	20.00
New London, Conn.	21,199	1	1	.047	100.00
Newport, Ky.	32,133	8	8	.249	100.00
Newport News, Va.	22,622	1	1	.044	100.00
Newport, R. I.	30,585	1	.....	.033	.....
Niagara Falls, N. Y.	38,466	7	7	.182	100.00
Norristown, Pa.	31,969	5	1	.156	20.00
Northampton, Mass.	20,006	4	2	.200	50.00
North Braddock, Pa.	15,684	1	.....	.064	.....
Norwich, Conn.	21,923	1	.....	.046	.....
Oak Park, Ill.	27,816	1	1	.036	100.00
Oklahoma City, Okla.	97,588	3	3	.031	100.00
Olean, N. Y.	16,927	1	3	.....	.....
Orange, N. J.	33,626	6	3	.178	50.00
Paducah, Ky.	25,178	2	11	.....	.....
Passaic, N. J.	74,478	2	11	.....	.....
Pawtucket, R. I.	60,666	3	2	.049	66.67
Peabody, Mass.	18,785	4	3	.213	75.00
Peoria, Ill.	72,184	13	2	.180	15.38
Petersburg, Va.	25,817	2	1	.077	50.00
Pine Bluff, Ark.	17,777	4	.....	.225	.....
Pittsfield, Mass.	39,678	17	5	.428	29.41

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

CEREBROSPINAL MENINGITIS—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Plattsburg, N. Y.	13,111	1	3	.....	.....
Plymouth, Pa.	19,439	7	1	0.360	14.29
Pontiac, Mich.	18,006	4	8	.....	.....
Port Chester, N. Y.	16,727	1	.....	.060	.....
Portsmouth, N. H.	11,730	1	1	.085	100.00
Portsmouth, Ohio.	29,356	2	3	.....	.....
Portsmouth, Va.	40,093	2	[1] 3	.049	.....
Pottsville, Pa.	22,717	1	1	.044	100.00
Quincy, Ill.	36,532	3	.....	.081	.....
Quincy, Mass.	39,022	2	5	.....	.....
Rahway, N. J.	10,361	1	1	.097	100.00
Raleigh, N. C.	20,274	1	1	.049	100.00
Richmond, Ind.	25,080	6	2	.239	33.33
Rockford, Ill.	56,739	4	1	.070	25.00
Saginaw, Mich.	56,469	5	4	.089	80.00
St. Cloud, Minn.	12,013	1	7	.....	.....
St. Joseph, Mo.	86,498	8	.....	.092	.....
Salem, Mass.	49,346	1	1	.020	100.00
San Diego, Calif.	56,412	32	6	.567	18.75
San Jose, Calif.	39,810	1	.....	.025	.....
Saratoga Springs, N. Y.	13,539	2	.....	.148	.....
Sault Ste. Marie, Mich.	14,130	1	1	.071	100.00
Shreveport, La.	37,064	1	1	.027	100.00
Sioux City, Iowa.	58,569	9	4	.154	44.44
Somerville, Mass.	88,618	2	2	.023	100.00
South Bend, Ind.	70,067	4	.....	.057	.....
South Bethlehem, Pa.	24,886	3	.....	.121	.....
Southbridge, Mass.	14,465	1	2	.....	.....
Spartanburg, S. C.	21,985	1	1	.045	100.00
Springfield, Ill.	62,623	2	2	.032	100.00
Springfield, Ohio.	52,296	4	2	.076	50.00
Steubenville, Ohio.	28,259	9	9	.318	100.00
Stockton, Calif.	36,209	6	14	.....	.....
Streator, Ill.	14,313	1	1	.070	100.00
Superior, Wis.	47,167	6	5	.127	83.33
Topeka, Kans.	49,538	1	.....	.020	.....
Trinidad, Colo.	11,413	1	1	.089	100.00
Troy, N. Y.	78,094	5	10	.....	.....
Tuscaloosa, Ala.	10,824	3	3	.277	100.00
Virginia, Minn.	15,954	5	.....	.313	.....
Waco, Tex.	31,015	3	3	.096	100.00
Waltham, Mass.	31,011	2	2	.064	100.00
Warren, Ohio.	13,308	6	4	.451	66.67
Washington, Pa.	22,076	1	.....	.045	.....
Waterbury, Conn.	89,201	11	2	.123	18.18
Waterloo, Iowa.	36,987	1	1	.027	100.00
Watertown, Mass.	15,188	1	.....	.066	.....
Watertown, N. Y.	30,404	5	3	.164	60.00
Waukegan, Ill.	20,917	8	3	.382	37.50
West Hoboken, N. J.	44,386	1	.....	.022	.....
West New York, N. J.	19,613	1	.....	.051	.....
Wheeling, W. Va.	43,657	2	3	.....	.....
Wichita Falls, Tex.	12,749	4	1	.314	25.00
Wichita, Kans.	73,597	2	2	.027	100.00
Wilkinsburg, Pa.	23,899	1	1	.042	100.00
Winona, Minn.	[2] 18,583	3	3	.161	100.00
Winston-Salem, N. C.	23,136	3	2	.091	66.67
Winthrop, Mass.	13,105	1	1	.076	100.00
Zanesville, Ohio.	31,320	2	4	.....	.....

DIPHTHERIA.[3]

Aberdeen, S. Dak.	15,926	9	.....	0.565	.....
Adams, Mass.	11,406	19	3	1.319	15.79
Adrian, Mich.	11,570	16	2	1.383	12.50
Akron, Ohio.	93,604	821	72	8.771	8.77
Alameda, Calif.	28,433	40	2	1.407	5.00
Albuquerque, N. Mex.	11,599	24	6	1.654	25.00
Alexandria, La.	16,232	40	.....	2.464	.....
Alexandria, Va.	17,939	1	.....	.056	.....
Alpena, Mich.	13,365	2	.....	.150	.....
Alton, Ill.	23,753	52	.....	2.196	.....

[1] One case was reported in 1916, died in 1917.
[2] Population Apr. 15, 1915.
[3] Cities in which no cases of this disease were reported are not included in this table.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

DIPHTHERIA—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Altoona, Pa	59,712	223	19	5.409	5.88
Amarillo, Tex	20,882	3	1	.144	33.33
Amesbury, Mass	10,200	99	4	9.706	4.04
Amsterdam, N. Y	38,043	34	2	.894	5.88
Anaconda, Mont	10,631	2	2	.188	100.00
Anderson, Ind	24,230	27	4	1.114	14.81
Ann Arbor, Mich	15,041	75	6	4.986	8.00
Anniston, Ala	11,326	12	1	.838	8.33
Ansonia, Conn	16,954	20	6	1.180	30.00
Appleton, Wis	18,005	12	3	.666	25.00
Arlington, Mass	13,073	31	1	2.371	3.23
Asbury Park, N. J	11,629	4	.....	.273	.....
Asheville, N. C	25,656	23	1	.896	4.35
Ashland, Ky	12,105	31	.....	2.562	.....
Ashtabula, Ohio	22,009	12	1	.545	8.33
Atchison, Kans	16,785	20	.....	1.192	.....
Atlantic City, N. J	59,515	29	2	.487	6.90
Attleboro, Mass	19,776	45	2	2.275	4.44
Auburn, N. Y	37,823	47	9	1.243	19.15
Augusta, Me	14,325	6	.....	.419	.....
Aurora, Ill	34,795	45	5	1.293	11.11
Austin, Tex	35,612	67	8	1.881	11.94
Bakersfield, Calif	17,543	12	2	.684	16.67
Bangor, Me	26,958	14	2	.519	14.29
Barberton, Ohio	14,187	40	8	2.819	20.00
Barre, Vt	12,401	1	.....	.081	.....
Batavia, N. Y	13,505	8	1	.588	12.50
Battle Creek, Mich	30,159	186	9	6.167	4.84
Bay City, Mich	48,390	61	6	1.261	9.84
Bayonne, N. J	72,204	76	.....	1.053	.....
Beacon, N. Y	11,674	22	.....	1.885	.....
Beatrice, Nebr	10,437	1	.....	.096	.....
Beaumont, Tex	28,851	25	3	.867	12.00
Beaver Falls, Pa	13,749	19	.....	1.382	.....
Bedford, Ind	10,613	5	.....	.471	.....
Bellaire, Ohio	14,575	22	4	1.509	18.18
Belleville, N. J	12,797	53	5	4.142	9.43
Bellingham, Wash	34,362	4	.....	.116	.....
Beloit, Wis	18,547	34	4	1.833	11.76
Benton Harbor, Mich	11,099	11	2	.991	18.18
Berkeley, Calif	60,427	32	6	.530	18.75
Berlin, N. H	13,892	9	1	.648	11.11
Bethlehem, Pa	14,353	59	3	4.111	5.08
Beverly, Mass	22,128	12	.....	.542	.....
Billings, Mont	15,123	4	1	.264	25.00
Binghamton, N. Y	54,864	343	25	6.252	7.29
Bloomfield, N. J	19,013	39	.....	2.051	.....
Bloomington, Ind	11,661	6	.....	.515	.....
Boise, Idaho	35,951	4	.....	.111	.....
Braddock, Pa	22,060	119	13	5.394	10.92
Bradford, Pa	[1] 14,544	8	.....	.550	.....
Brazil, Ind	10,472	5	.....	.477	.....
Bridgeton, N. J	14,425	36	3	2.496	8.33
Bristol, Conn	16,318	11	2	.674	18.18
Bristol, Pa	10,826	4	1	.369	25.00
Brockton, Mass	69,152	100	2	1.446	2.00
Brookline, Mass	33,526	40	.....	1.193	.....
Brunswick, Ga	10,984	4	.....	.364	.....
Burlington, Iowa	25,144	4	.....	.159	.....
Burlington, Vt	21,802	69	10	3.165	14.49
Butler, Pa	28,677	103	.....	3.592	.....
Cairo, Ill	15,995	12	.....	.750	.....
Cambridge, Ohio	13,804	16	2	1.159	12.50
Canton, Ohio	62,566	106	10	1.694	9.43
Carbondale, Pa	19,597	59	11	3.011	18.64
Carlisle, Pa	10,795	8	.....	.741	.....
Carnegie, Pa	11,963	7	1	.585	14.29
Cedar Rapids, Iowa	38,033	14	2	.368	14.29
Central Falls, R. I	26,101	45	7	1.724	15.56
Centralia, Ill	11,838	6	.....	.507	.....
Chambersburg, Pa	12,475	18	.....	1.443	.....
Charleston, S. C	61,041	115	4	1.884	3.48
Charleston, W. Va	31,060	64	4	2.061	6.25
Chelsea, Mass	48,405	156	11	3.223	7.05
Chester, Pa	41,857	59	10	1.410	16.95
Cheyenne, Wyo	[1] 11,320	63	3	5.565	4.76
Chicago Heights, Ill	22,863	242	25	10.585	10.33

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

DIPHTHERIA—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Chicopee, Mass	29,050	70	8	2.397	11.43
Chillicothe, Ohio	15,625	22	.....	1.408	.....
Cicero, Ill	20,846	96	.....	4.605	.....
Cleburne, Tex	12,553	27	.....	2.151	.....
Clinton, Iowa	27,678	37	3	1.337	8.11
Clinton, Mass	[1] 13,075	5	.....	.382	.....
Coatesville, Pa	14,968	14	2	.933	14.29
Coffeyville, Kans	18,331	18	.....	.982	.....
Cohoes, N. Y	25,292	16	2	.633	12.50
Colorado Springs, Colo	38,965	13	1	.334	7.69
Columbus, Ga	26,309	7	.....	.266	.....
Concord, N. H	22,858	138	3	6.037	2.17
Connellsville, Pa	15,476	9	.....	.567	.....
Corning, N. Y	15,676	95	2	6.060	2.11
Corpus Christi, Tex	10,789	11	3	1.020	27.27
Corsicana, Tex	10,066	10	.....	.993	.....
Cortland, N. Y	13,321	1	.....	.075	.....
Coshocton, Ohio	11,887	28	.....	2.356	.....
Council Bluffs, Iowa	31,838	15	.....	.471	.....
Covington, Ky	59,623	131	5	2.197	3.82
Cranston, R. I	26,773	68	.....	2.540	.....
Cumberland, Md	26,695	48	5	1.799	10.42
Cumberland, R. I	10,998	5	.....	.456	.....
Danbury, Conn	22,931	15	.....	.654	.....
Danville, Ill	32,969	15	1	.455	6.67
Danville, Va	20,183	25	.....	1.239	.....
Davenport, Iowa	49,618	50	3	1.008	6.00
Decatur, Ill	41,483	21	3	.506	14.29
Dedham, Mass	10,618	41	5	3.861	12.20
Dover, N. H	13,270	14	2	1.055	14.29
Du Bois, Pa	14,901	83	.....	5.569	.....
Dubuque, Iowa	40,096	58	5	1.447	8.62
Duluth, Minn	97,077	212	13	2.184	6.13
Dunkirk, N. Y	21,311	33	1	1.548	3.03
Dunmore, Pa	21,295	67	.....	3.146	.....
Durham, N. C	26,160	19	2	.726	10.53
East Chicago, Ind	30,265	39	7	1.288	17.95
East Cleveland, Ohio	13,964	28	.....	2.020	.....
Easthampton, Mass	10,656	30	2	2.815	6.67
Easton, Pa	30,854	45	7	1.458	15.56
East Orange, N. J	43,761	44	3	1.005	6.82
East Providence, R. I	18,485	52	2	2.813	3.85
East St. Louis, Ill	77,312	225	28	2.910	12.44
Eau Claire, Wis	18,887	51	5	2.700	9.80
Edwardsville, Pa	10,771	35	4	3.249	11.43
Elgin, Ill	28,562	29	5	1.015	17.24
Elizabeth, N. J	88,930	359	16	4.041	4.46
Elmira, N. Y	28,272	75	2	1.980	2.67
El Paso, Tex	69,149	57	15	.824	25.32
Ellwood, Ind	[1] 11,028	5	1	.473	20.00
Elyria, Ohio	19,503	42	7	2.154	16.67
Enfield, Conn	11,924	14	.....	1.174	.....
Englewood, N. J	12,603	8	.....	.635	.....
Erie, Pa	76,592	186	17	2.428	9.14
Escanaba, Mich	15,854	2	1	.126	50.00
Evanston, Ill	29,304	55	7	1.877	12.73
Evansville, Ind	76,981	129	8	1.676	6.20
Everett, Mass	40,160	158	11	3.934	6.96
Everett, Wash	37,205	8	.....	.215	.....
Fairmont, W. Va	16,111	12	.....	.745	.....
Fargo, N. Dak	17,872	49	2	2.742	4.08
Farrell, Pa	[1] 10,190	46	4	4.514	8.70
Findlay, Ohio	[1] 14,858	61	2	4.106	3.28
Fitchburg, Mass	41,429	150	14	3.536	9.33
Flint, Mich	57,386	238	20	4.196	7.73
Fond du Lac, Wis	21,483	13	2	.605	15.38
Fort Collins, Colo	11,973	1	.....	.084	.....
Fort Scott, Kans	10,584	23	1	2.177	4.35
Fort Wayne, Ind	78,014	165	13	2.115	7.88
Fostoria, Ohio	10,959	6	.....	.547	.....
Framingham, Mass	14,249	12	3	.848	25.00
Franklin, Pa	21,455	4	1	.346	25.00
Frederick, Md	11,225	9	1	.802	11.11
Freeport, Ill	19,844	8	.....	.403	.....
Fremont, Ohio	11,034	12	1	1.088	8.33
Fresno, Calif	36,414	29	3	.799	10.34
Fulton, N. Y	12,158	41	4	3.373	9.76

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

DIPHTHERIA—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Galesburg, Ill.	24,629	73	4	2.964	5.48
Galveston, Tex.	42,650	54	4	1.266	7.41
Gardner, Mass.	17,534	295	13	16.824	4.41
Gary, Ind.	56,000	122	20	2.179	16.39
Glens Falls, N. Y.	17,160	31	4	1.807	12.90
Gloucester City, N. J.	11,375	5	.....	.440	.....
Gloversville, N. Y.	22,314	71	4	3.182	5.68
Grand Forks, N. Dak.	16,342	10	2	.612	20.00
Grand Island, Nebr.	13,133	6	.....	.457	.....
Granite City, Ill.	15,890	49	7	3.084	14.29
Great Falls, Mont.	[1] 13,948	14	2	1.004	14.29
Green Bay, Wis.	30,017	22	1	.733	4.55
Greenfield, Mass.	12,251	19	.....	1.551	.....
Greenville, S. C.	18,574	11	.....	.592	.....
Greenville, Tex.	10,301	7	2	.680	28.57
Greenwich, Conn.	19,594	18	2	.919	11.11
Hackensack, N. J.	17,412	12	1	.689	8.33
Hamilton, Ohio.	41,338	16	3	.387	18.75
Hammond, Ind.	27,016	48	3	1.777	6.25
Hancock, Mich.	12,578	14	3	1.113	21.43
Hannibal, Mo.	22,399	18	3	.804	16.67
Harrisburg, Pa.	73,276	199	14	2.716	7.04
Harrison, N. J.	17,345	31	1	1.787	3.23
Haverhill, Mass.	49,180	161	13	3.274	8.07
Hazleton, Pa.	28,981	66	10	2.277	15.15
Helena, Ark.	11,122	21	2	1.888	9.52
Henderson, Ky.	12,312	20	4	1.624	20.00
Hibbing, Minn.	17,550	10	1	.570	10.00
Highland Park, Mich.	33,850	144	8	4.253	5.55
Hoboken, N. J.	78,324	107	5	1.366	4.67
Holyoke, Mass.	66,503	112	20	1.684	17.86
Homestead, Pa.	23,071	40	4	1.734	10.00
Hornell, N. Y.	14,857	71	3	4.779	4.23
Hot Springs, Ark.	17,690	14	1	.791	7.14
Hudson, N. Y.	12,898	14	.....	1.085	.....
Huntington, Ind.	10,982	11	.....	1.002	.....
Hutchinson, Kans.	21,461	5	3	.233	60.00
Independence, Kans.	15,111	48	2	3.176	4.17
Independence, Mo.	11,984	15	2	1.254	13.33
Iowa City, Iowa.	11,626	4	.....	.344	.....
Ironwood, Mich.	15,095	21	2	1.391	9.52
Irvington, N. J.	16,710	36	1	2.154	2.78
Ishpeming, Mich.	[1] 12,448	6	.....	.482	.....
Ithaca, N. Y.	16,017	2	.....	.125	.....
Jackson, Mich.	35,096	124	8	3.445	6.45
Jacksonville, Fla.	79,065	46	4	.582	8.70
Jacksonville, Ill.	15,506	12	2	.774	16.67
Jamestown, N. Y.	37,431	114	3	3.046	2.63
Janesville, Wis.	14,411	8	.....	.555	.....
Jeffersonville, Ind.	[1] 10,412	1	.....	.096	.....
Johnstown, N. Y.	10,078	2	.....	.187	.....
Joliet, Ill.	38,549	193	4	5.007	2.07
Joplin, Mo.	33,400	4	3	.120	75.00
Kalamazoo, Mich.	50,408	137	9	2.718	6.57
Kankakee, Ill.	14,270	74	1	5.186	1.35
Kearny, N. J.	24,325	20	2	.822	10.00
Kenosha, Wis.	32,833	136	22	4.142	16.18
Kewanee, Ill.	13,607	3	.....	.220	.....
Kingston, N. Y.	26,910	19	2	.706	10.53
Kokomo, Ind.	21,929	63	2	2.873	3.17
Lackawanna, N. Y.	16,219	76	4	4.686	5.26
La Crosse, Wis.	31,833	176	11	5.529	6.25
La Fayette, Ind.	21,481	21	2	.978	9.52
Lakewood, Ohio.	23,813	24	1	1.008	4.17
Lancaster, Pa.	51,437	55	6	1.069	10.91
Lansford, Pa.	10,825	19	.....	1.755	.....
Lansing, Mich.	44,499	105	1	2.360	.95
Laporte, Ind.	13,572	18	.....	1.326	.....
La Salle, Ill.	12,332	70	7	5.676	10.00
Latrobe, Pa.	11,815	18	1	1.523	5.56
Laurium, Mich.	10,649	9	1	.845	11.11
Leavenworth, Kans.	[1] 19,363	43	5	2.221	11.63
Lebanon, Pa.	20,947	55	12	2.626	21.82
Leominster, Mass.	21,365	45	6	2.106	13.33
Lewiston, Me.	28,061	7	.....	.249	.....
Lewistown, Pa.	11,126	41	2	3.685	4.88

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

DIPHTHERIA—Continued

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Lexington, Ky	41,997	49	4	1.167	8.16
Lima, Ohio	37,145	133	12	3.581	9.02
Lincoln, Ill	11,991	47	6	3.920	12.77
Lincoln, Nebr	46,957	110	12	2.343	10.91
Little Falls, N. Y	13,653	7	1	.513	14.29
Logansport, Ind	21,338	6		.281	
Long Beach, Calif	29,163	13	2	.446	15.38
Long Branch, N. J	15,733	25	1	1.589	4.00
Lorain, Ohio	38,266	110	12	2.875	10.91
Ludington, Mich	10,566	1		.095	
Lynchburg, Va	33,497	22	1	.657	4.55
McAlester, Okla	19,398	2		.103	
McKeesport, Pa	48,299	224	10	4.638	4.46
McKees Rocks, Pa	20,795	18		.866	
Macon, Ga	48,099	68	5	1.475	7.35
Madison, Wis	31,315	12	1	.383	8.33
Mahanoy City, Pa	17,709	28	7	1.581	25.00
Malden, Mass	52,243	220	21	4.211	9.55
Manchester, Conn	15,859	13		.820	
Manchester, N. H	79,607	78	13	.981	16.67
Manistee, Mich	[1] 12,381	38	3	3.069	7.89
Manitowoc, Wis	13,931	23		1.651	
Mankato, Minn	[1] 10,365	4		.386	
Mansfield, Ohio	23,051	15		.651	
Marinette, Wis	[1] 14,610	7	1	.479	14.29
Marion, Ind	19,923	38	3	1.907	7.89
Marlboro, Mass	15,265	23		1.505	
Marquette, Mich	12,555	6	1	.478	16.67
Marshall, Tex	14,076	38	1	2.700	2.63
Martinsburg, W. Va	12,584	31	1	2.388	3.22
Mason City, Iowa	14,938	10	2	.669	20.00
Massillon, Ohio	15,509	13	1	.838	7.69
Maywood, Ill	10,903	22	2	2.018	9.09
Medford, Mass	26,681	71	4	2.661	5.63
Melrose, Mass	17,724	83	4	4.796	4.71
Menominee, Mich	[1] 10,507	2		.190	
Meriden, Conn	29,431	74	6	2.514	8.11
Methuen, Mass	14,320	17	1	1.187	5.88
Michigan City, Ind	21,913	10	2	.456	20.00
Middletown, N. Y	15,800	22	2	1.385	9.09
Middletown, Ohio	16,384	32	1	1.955	3.13
Milford, Mass	14,280	25		1.751	
Millville, N. J	13,813	24	1	1.737	4.17
Mishawaka, Ind	17,083	9	2	.527	22.22
Mobile, Ala	59,201	38	3	.642	7.89
Moline, Ill	27,976	52	4	1.859	7.69
Monessen, Pa	23,070	78		3.381	
Monroe, La	13,698	14		1.022	
Montclair, N. J	27,087	10	1	.369	10.00
Montgomery, Ala	44,039	37	3	.840	8.11
Morgentown, W. Va	14,444	14	3	.969	21.43
Morristown, N. J	13,410	23		1.715	
Moundsville, W. Va	11,513	4	1	.347	25.00
Mount Vernon, N. Y	37,991	94	1	2.474	1.06
Mount Vernon, Ohio	10,877	1		.092	
Muncie, Ind	23,653	40	1	1.559	2.50
Muskegon, Mich	27,434	5	1	.182	20.00
Nanticoke, Pa	23,811	52		2.184	
Nashua, N. H	27,541	37	3	1.343	8.11
Natick, Mass	10,140	18	1	1.775	5.56
New Albany, Ind	23,629	10	2	.423	20.00
New Britain, Conn	55,385	85	2	1.535	2.35
New Brunswick, N. J	25,855	51		1.973	
Newburgh, N. Y	29,893	54	8	1.806	14.81
Newburyport, Mass	15,291	20	4	1.308	20.00
Newcastle, Ind	14,144	6	2	.424	33.33
New Castle, Pa	41,915	42	7	1.002	16.67
New London, Conn	21,199	80	4	3.774	5.00
Newport, Ky	82,133	19	1	.591	5.26
Newport News, Va	22,022	14	2	.619	14.29
Newport, R. I	30,585	438	11	14.321	2.51
New Rochelle, N. Y	39,192	22	2	.561	9.09
Newton, Mass	44,345	74	9	1.669	12.16
Niagara Falls, N. Y	38,466	98	4	2.418	4.08
Norristown, Pa	31,869	74	11	2.315	14.86
North Adams, Mass	[1] 22,019	10	4	.454	40.00
Northampton, Mass	20,006	29	3	1.449	10.34

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

DIPHTHERIA—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
North Attleboro, Mass.	11,248	71	.....	6.312	.....
North Braddock, Pa.	15,684	48	5	3.060	10.42
North Tonawanda, N. Y.	14,060	20	1	1.422	5.00
North Yakima, Wash.	22,058	5	.....	.227	.....
Norwalk, Conn.	27,332	32	5	1.171	15.63
Norwich, Conn.	21,923	26	.....	1.186	.....
Norwood, Ohio.	23,269	36	3	1.547	8.33
Oak Park, Ill.	27,816	56	3	2.013	5.36
Ogden, Utah.	32,343	36	5	1.113	13.89
Oil City, Pa.	20,162	33	4	1.637	12.12
Oklahoma City, Okla.	97,588	56	4	.574	7.14
Olean, N. Y.	16,927	45	4	2.658	8.89
Orange, N. J.	33,636	58	4	1.724	6.90
Oshkosh, Wis.	36,549	32	2	.876	6.25
Ossining, N. Y.	14,064	38	.....	2.702	.....
Oswego, N. Y.	24,219	5	2	.206	40.00
Ottumwa, Iowa.	24,708	9	1	.364	11.11
Owensboro, Ky.	18,070	31	.....	1.716	.....
Owosso, Mich.	10,326	22	.....	2.131	.....
Paducah, Ky.	25,178	10	.....	.397	.....
Parkersburg, W. Va.	21,059	49	3	2.327	6.12
Pasadena, Calif.	49,620	7	.....	.141	.....
Passaic, N. J.	74,478	334	18	4.485	5.39
Pawtucket, R. I.	60,666	134	11	2.209	8.21
Peabody, Mass.	18,735	10	.....	.532	.....
Peekskill, N. Y.	19,034	38	.....	1.996	.....
Pekin, Ill.	10,973	14	.....	1.276	.....
Peoria, Ill.	72,184	232	20	3.214	8.62
Perth Amboy, N. J.	42,646	104	8	2.439	7.69
Peru, Ind.	12,491	4	1	.320	25.00
Petersburg, Va.	25,817	49	4	1.898	8.16
Phillipsburg, N. J.	15,879	38	2	2.393	5.26
Phoenixville, Pa.	11,871	14	.....	1.179	.....
Pine Bluff, Ark.	17,777	16	.....	.900	.....
Piqua, Ohio.	14,275	12	2	.841	16.67
Pittsfield, Mass.	39,678	42	5	1.059	11.90
Pittston, Pa.	18,975	37	.....	1.950	.....
Plainfield, N. J.	24,330	51	7	2.096	13.73
Plattsburg, N. Y.	13,111	24	1	1.831	4.17
Plymouth, Mass.	14,001	29	4	2.071	13.79
Plymouth, Pa.	19,439	13	.....	.669	.....
Pomona, Calif.	13,624	1	.....	.073	.....
Pontiac, Mich.	18,006	79	5	4.388	6.33
Port Chester, N. Y.	16,727	17	.....	1.016	.....
Port Huron, Mich.	[1] 18,863	29	2	1.537	6.90
Portland, Me.	64,720	69	8	1.066	11.59
Portsmouth, N. H.	11,730	18	2	1.535	11.11
Portsmouth, Ohio.	29,356	70	7	2.385	10.00
Portsmouth, Va.	40,693	43	2	1.057	4.65
Pottsville, Pa.	22,717	107	9	4.710	8.41
Poughkeepsie, N. Y.	30,786	26	3	.845	11.54
Provo, Utah.	10,923	10	.....	.915	.....
Pueblo, Colo.	56,084	56	5	.999	8.93
Punxsutawney (Greater), Pa.	10,745	5	1	.465	20.00
Quincy, Ill.	36,832	72	6	1.955	8.33
Quincy, Mass.	39,022	88	1	2.255	1.14
Racine, Wis.	47,465	15	3	.316	20.00
Rahway, N. J.	10,361	30	.....	2.895	.....
Raleigh, N. C.	20,274	25	1	1.233	4.00
Reno, Nev.	15,514	11	4	.709	36.36
Richmond, Ind.	25,080	84	11	3.349	13.10
Roanoke, Va.	46,282	68	1	1.469	1.47
Rockford, Ill.	56,739	42	3	.740	7.14
Rock Island, Ill.	29,452	37	1	1.256	2.70
Rocky Mount, N. C.	12,673	10	1	.789	10.00
Rome, Ga.	15,607	50	2	3.204	4.00
Rome, N. Y.	24,259	18	1	.742	5.56
Rutland, Vt.	15,038	19	1	1.263	5.26
Sacramento, Calif.	68,994	41	7	.594	17.07
Saginaw, Mich.	56,469	86	5	1.523	5.81
St. Cloud, Minn.	12,013	29	1	2.414	3.45
St. Joseph, Mo.	86,498	233	14	2.694	6.01
Salem, Mass.	49,346	34	2	.689	5.88
Salem, Oreg.	21,274	3	1	.141	33.33
San Diego, Calif.	50,412	88	2	1.500	2.27
Sandusky, Ohio.	20,226	4	1	.198	25.00
Sanford, Me.	11,217	3	.....	.267	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

DIPHTHERIA—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
San Jose, Calif.	29,810	33	3	0.529	9.09
Santa Ana, Calif.	10,981	1	.....	.091	.....
Santa Barbara, Calif.	15,360	4	1	.260	25.00
Saratoga Springs, N. Y.	13,839	10	.....	.723	.....
Sault Ste. Marie, Mich.	14,130	41	3	2.902	7.32
Sedalia, Mo.	19,711	14	2	.710	14.29
Selma, Ala.	15,945	8	.....	.502	.....
Sharon, Pa.	19,156	28	2	1.462	7.14
Shawnee, Okla.	19,051	17	2	.892	11.76
Sheboygan, Wis.	28,907	23	4	.796	17.39
Shelbyville, Ind.	11,201	6	2	.536	33.33
Shreveport, La.	37,064	25	.....	.675	.....
Sioux City, Iowa.	58,568	25	3	.427	12.00
Sioux Falls, S. Dak.	16,987	6	1	.355	16.67
Somerville, Mass.	88,618	255	24	2.878	9.41
South Bend, Ind.	70,967	42	4	.592	9.52
South Bethlehem, Pa.	24,886	55	.....	2.210	.....
Southbridge, Mass.	14,465	18	2	1.244	11.11
Spartanburg, S. C.	21,985	23	2	1.046	8.70
Springfield, Ill.	62,623	103	8	1.645	7.77
Springfield, Ohio.	52,298	39	2	.746	5.13
Stamford, Conn.	31,810	87	11	2.735	12.64
Staunton, Va.	11,823	4	1	.338	25.00
Steelton, Pa.	15,759	39	5	2.475	12.82
Steubenville, Ohio.	28,259	18	.....	.637	.....
Stillwater, Minn.	[1] 10,198	3	.....	.294	.....
Stockton, Calif.	36,209	51	3	1.408	5.88
Streator, Ill.	14,313	22	.....	1.537	.....
Superior, Wis.	47,167	52	4	1.102	7.69
Tamaqua, Pa.	11,062	19	.....	1.718	.....
Tampa, Fla.	56,251	114	4	2.027	3.51
Taunton, Mass.	36,610	28	3	.765	10.71
Taylor, Pa.	12,593	48	.....	3.821	.....
Terre Haute, Ind.	67,361	92	6	1.366	6.52
Texarkana, Tex.	13,099	13	2	.992	15.38
Tiffin, Ohio.	12,962	13	1	1.003	7.69
Topeka, Kans.	49,538	77	6	1.554	7.79
Trinidad, Colo.	14,413	4	1	.278	25.00
Troy, N. Y.	78,094	90	16	1.152	17.78
Tucson, Ariz.	17,324	1	.....	.058	.....
Tuscaloosa, Ala.	10,824	31	.....	2.864	.....
Utica, N. Y.	89,272	73	10	.818	13.70
Vallejo, Calif.	13,803	2	.....	.145	.....
Virginia, Minn.	15,954	23	4	1.442	17.39
Waco, Tex.	34,015	29	2	.853	6.90
Walla Walla, Wash.	26,067	1	.....	.038	.....
Waltham, Mass.	31,011	69	5	2.225	7.25
Warren, Ohio.	13,308	21	6	1.574	28.57
Warren, Pa.	15,083	21	.....	1.392	.....
Washington, Pa.	22,076	17	.....	.770	.....
Waterbury, Conn.	89,201	156	12	1.749	7.69
Waterloo, Iowa.	36,987	12	1	.324	8.33
Watertown, Mass.	15,188	93	.....	6.123	.....
Watertown, N. Y.	30,404	7	.....	.230	.....
Waukegan, Ill.	20,917	47	5	2.247	10.64
Wausau, Wis.	19,966	19	5	.966	26.32
Webster, Mass.	13,484	66	2	4.895	3.03
West Chester, Pa.	13,403	9	1	.671	11.11
Westfield, Mass.	18,769	42	6	2.238	14.29
West Hoboken, N. J.	41,396	49	7	1.184	14.29
West New York, N. J.	19,613	53	.....	2.702	.....
West Orange, N. J.	13,984	40	3	2.860	7.50
Wheeling, W. Va.	43,657	55	2	1.260	3.64
White Plains, N. Y.	23,511	28	3	1.200	10.71
Wichita Falls, Tex.	12,749	2	1	.157	50.00
Wichita, Kans.	73,597	46	8	.625	17.39
Wilkes-Barre, Pa.	78,334	264	24	3.370	9.09
Wilkinsburg, Pa.	23,599	36	4	1.526	11.11
Wilmington, Del.	95,369	83	12	.870	14.46
Wilmington, N. C.	30,400	30	1	.987	3.33
Winchester, Mass.	10,812	8	.....	.740	.....
Winona, Minn.	[1] 18,583	12	2	.646	16.67
Winston-Salem, N. C.	39,136	32	6	.986	18.75
Winthrop, Mass.	15,105	6	.....	.610	.....
Woburn, Mass.	16,076	24	2	1.493	8.33
Zanesville, Ohio.	31,220	19	3	.607	15.79

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

GONORRHEA.[1]

City.	Estimated population July 1, 1917.	Cases reported.	Cases reported per 1,000 inhabitants.
Alameda, Calif.	28,433	2	0.070
Ann Arbor, Mich.	15,041	6	.399
Bakersfield, Calif.	17,543	2	.114
Bay City, Mich.	48,390	12	.248
Berkeley, Calif.	60,427	47	.778
Berlin, N. H.	13,892	2	.144
Bloomfield, N. J.	19,013	2	.105
Bristol, Conn.	16,318	2	.123
Burlington, Iowa.	25,144	114	4.534
Cambridge, Ohio.	13,804	2	.145
Canton, Ohio.	62,566	3	.048
Cedar Rapids, Iowa.	38,033	3	.079
Chillicothe, Ohio.	15,625	2	.128
Council Bluffs, Iowa.	31,838	5	.157
Dubuque, Iowa.	40,096	30	.748
Elgin, Ill.	28,562	2	.070
Elwood, Ind.	[2] 11,028	1	.091
Eureka, Calif.	15,142	10	.660
Findlay, Ohio.	[2] 14,858	3	.202
Flint, Mich.	57,386	45	.784
Fremont, Ohio.	11,034	26	2.356
Fresno, Calif.	36,314	4	.110
Hamilton, Ohio.	41,338	19	.460
Hammond, Ind.	27,016	1	.037
Hannibal, Mo.	22,390	6	.268
Iowa City, Iowa.	11,626	5	.430
Ithaca, N. Y.	16,017	6	.375
Leavenworth, Kans.	[2] 19,363	14	.723
Long Beach, Calif.	29,163	4	.137
Long Branch, N. J.	15,733	1	.064
Lorain, Ohio.	38,266	2	.052
Manchester, Conn.	15,859	4	.252
Marquette, Mich.	12,555	2	.159
Mason City, Iowa.	14,918	10	.669
Massillon, Ohio.	15,509	15	.967
Middletown, N. Y.	15,890	1	.063
Middletown, Ohio.	16,384	21	1.282
Montclair, N. J.	27,087	17	.628
New Britain, Conn.	55,385	1	.018
Norwalk, Conn.	27,332	2	.073
Norwich, Conn.	21,923	8	.365
Norwood, Ohio.	23,269	1	.043
Pasadena, Calif.	49,620	6	.121
Pine Bluff, Ark.	17,777	29	1.631
Piqua, Ohio.	14,275	1	.070
Port Chester, N. Y.	16,727	4	.239
Redlands, Calif.	14,573	2	.137
Sacramento, Calif.	68,984	12	.174
San Diego, Calif.	56,412	128	2.269
Sandusky, Ohio.	20,226	1	.049
San Jose, Calif.	39,810	11	.276
Santa Ana, Calif.	10,951	15	1.366
Springfield, Ohio.	52,296	8	.153
Stockton, Calif.	36,209	3	.083
Vallejo, Calif.	13,803	6	.435
Waterloo, Iowa.	36,987	18	.487
West Orange, N. J.	13,964	1	.072
Wichita Falls, Tex.	12,749	60	4.706

[1] Cities in which no cases of this disease were reported are not included in this table. No death from this disease was reported.
[2] Population Apr. 15, 1916.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

MALARIA.[1]

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Alameda, Calif.	28,433	1	.....	0.035	.....
Alexandria, La.	16,232	2	4	.....	.....
Amarillo, Tex.	20,882	2	.....	.096	.....
Anniston, Ala.	14,326	23	2	1.605	8.70
Bakersfield, Calif.	17,543	12	4	.684	33.33
Beaumont, Tex.	28,851	16	11	.555	68.75
Berkeley, Calif.	60,427	8	.....	.132	.....
Bessemer, Ala.	17,156	1	8	.058	.....
Brockton, Mass.	69,152	2	2	.029	100.00
Brookline, Mass.	33,526	3	.....	.089	.....
Cairo, Ill.	15,995	19	.....	1.188	.....
Cape Girardeau, Mo.	11,146	1	1	.090	100.00
Chicopee, Mass.	29,950	2	.....	.067	.....
Cleburne, Tex.	12,553	1	1	.080	100.00
Dedham, Mass.	10,618	11	.....	1.036	.....
Durham, N. C.	26,160	2	2	.076	100.00
Easthampton, Mass.	10,656	2	.....	.188	.....
East Orange, N. J.	43,761	5	.....	.114	.....
Englewood, N. J.	12,603	2	.....	.159	.....
Eureka, Calif.	15,142	1	.....	.066	.....
Evansville, Ind.	76,981	2	.....	.026	.....
Flint, Mich.	57,386	1	.....	.017	.....
Fort Scott, Kans.	10,564	1	.....	.095	.....
Framingham, Mass.	14,149	1	1	.071	100.00
Greenwich, Conn.	19,504	11	.....	.561	.....
Hackensack, N. J.	17,412	3	.....	.172	.....
Hannibal, Mo.	22,399	3	.....	.134	.....
Helena, Ark.	11,122	228	5	20.500	2.19
Hoboken, N. J.	78,324	1	.....	.013	.....
Hot Springs, Ark.	17,690	22	5	1.244	22.73
Independence, Kans.	15,111	1	1	.066	100.00
Irvington, N. J.	16,710	3	.....	.180	.....
Joplin, Mo.	33,100	28	2	.846	7.14
Kearny, N. J.	24,325	2	.....	.082	.....
La Salle, Ill.	12,332	1	1	.081	100.00
Leavenworth, Kans.	[2]19,363	1	1	.052	100.00
Long Branch, N. J.	15,733	1	.....	.064	.....
Lorain, Ohio.	38,266	1	.....	.026	.....
Mobile, Ala.	59,261	18	14	.304	77.78
Montclair, N. J.	27,087	1	.....	.037	.....
Montgomery, Ala.	44,039	6	4	.136	66.67
Morristown, N. J.	13,410	3	.....	.224	.....
Natick, Mass.	10,140	1	.....	.099	.....
Newton, Mass.	44,345	3	.....	.068	.....
Northampton, Mass.	20,006	1	.....	.050	.....
Orange, N. J.	33,636	4	.....	.119	.....
Perth Amboy, N. J.	42,049	1	.....	.023	.....
Pittsfield, Mass.	39,078	1	.....	.025	.....
Rocky Mount, N. C.	12,073	2	1	.165	50.00
Sacramento, Calif.	68,984	22	2	.319	9.09
Santa Ana, Calif.	10,981	2	.....	.182	.....
Selma, Ala.	15,915	28	5	1.756	17.86
Shawnee, Okla.	19,051	42	.....	2.205	.....
Shreveport, La.	37,061	1	12	.....	.....
Somerville, Mass.	88,618	1	.....	.011	.....
Spring Field, Ill.	62,623	1	.....	.016	.....
Spring Field, Ohio.	52,286	1	.....	.019	.....
Stockton, Calif.	36,299	10	.....	.275	.....
Tuscaloosa, Ala.	10,824	30	1	2.772	3.33
Waco, Tex.	34,015	6	2	.176	33.33
Weehawken, N. J.	13,064	1	.....	.077	.....
Wichita Falls, Tex.	12,749	7	.....	.549	.....
Wilkinsburg, Pa.	23,869	1	.....	.042	.....
Wilmington, N. C.	30,000	10	.....	.329	.....
Winston-Salem, N. C.	33,139	2	2	.060	100.00

[1] Cities in which no cases of this disease were reported are not included in this table.
[2] Population Apr. 1, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

MEASLES.[1]

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Aberdeen, Wash	21,392	462	.....	21.597	.....
Adams, Mass	14,406	30	.....	2.082	.....
Adrian, Mich	11,570	10	.....	.864	.....
Akron, Ohio	93,604	1,572	22	16.794	1.40
Alameda, Cal	28,433	193	.....	6.788	.....
Albuquerque, N. Mex	14,509	290	1	19.988	.34
Alexandria, La	16,232	691	.....	42.570	.....
Alexandria, Va	17,939	1	.....	.056	.....
Alpena, Mich	13,365	132	.....	9.877	.....
Alton, Ill	23,783	99	.....	4.163	.....
Altoona, Pa	59,712	49	.....	.821	.....
Amarillo, Tex	20,882	115	3	5.507	2.61
Amesbury, Mass	10,200	17	1	1.667	5.88
Amsterdam, N. Y	38,043	91	.....	2.392	.....
Anderson, Ind	24,230	189	4	7.800	2.12
Ann Arbor, Mich	15,041	449	.....	29.852	.....
Anniston, Ala	14,326	79	2	5.514	2.53
Ansonia, Conn	16,954	57	3	3.362	5.26
Arlington, Mass	13,073	287	.....	21.954	.....
Asbury Park, N. J	14,629	95	2	6.494	2.11
Asheville, N. C	25,656	264	2	10.290	.76
Ashland, Ky	12,195	125	8	10.250	6.40
Ashtabula, Ohio	22,008	30	1	1.363	3.33
Astoria, Oreg	10,487	303	.....	28.893	.....
Atchison, Kans	16,785	113	.....	6.732	.....
Atlantic City, N. J	59,515	1,092	2	18.348	.18
Attleboro, Mass	19,776	36	.....	1.820	.....
Auburn, N. Y	37,823	38	.....	1.005	.....
Augusta, Mo	14,325	18	.....	1.257	.....
Aurora, Ill	34,795	95	.....	2.730	.....
Austin, Tex	35,612	50	5	1.404	10.00
Bakersfield, Calif	17,543	5	.....	.285	.....
Barberton, Ohio	14,187	2	1	.141	50.00
Barre, Vt	12,401	149	3	12.015	2.01
Batavia, N. Y	13,595	10	.....	.736	.....
Battle Creek, Mich	30,159	176	.....	5.836	.....
Bay City, Mich	48,390	21	.....	.434	.....
Bayonne, N. J	72,204	30	.....	.415	.....
Beacon, N. Y	11,674	160	1	13.706	.63
Beatrice, Nebr	10,437	13	3	1.246	23.08
Beaver Falls, Pa	13,749	29	.....	2.109	.....
Bedford, Ind	10,613	48	.....	4.523	.....
Bellaire, Ohio	14,575	29	.....	1.990	.....
Belleville, N. J	12,797	225	3	17.582	1.33
Bellingham, Wash	24,362	236	2	9.868	.85
Beloit, Wis	18,547	17	.....	.917	.....
Benton Harbor, Mich	11,099	33	.....	2.973	.....
Berkeley, Calif	60,427	465	1	7.695	.22
Berlin, N. H	13,892	10	.....	.720	.....
Bessemer, Ala	17,156	163	11	9.501	6.75
Bethlehem, Pa	14,353	21	.....	1.463	.....
Beverly, Mass	22,128	33	.....	1.491	.....
Billings, Mont	15,123	55	.....	3.637	.....
Binghamton, N. Y	54,864	724	8	13.196	1.10
Bloomfield, N. J	19,013	56	.....	2.945	.....
Bloomington, Ind	11,661	140	7	12.006	5.00
Boise, Idaho	35,951	134	.....	3.727	.....
Braddock, Pa	22,060	113	.....	5.122	.....
Bradford, Pa	[2] 14,544	207	.....	14.283	.....
Brazil, Ind	10,472	61	1	5.825	1.64
Bridgeton, N. J	14,425	187	.....	12.964	.....
Bristol, Conn	16,318	32	1	1.961	3.13
Bristol, Pa	10,826	2	.....	.185	.....
Brockton, Mass	69,152	45	.....	.651	.....
Brookline, Mass	33,526	205	.....	6.115	.....
Brunswick, Ga	10,984	280	10	25.492	3.57
Burlington, Vt	21,802	154	2	7.064	1.30
Butler, Pa	28,677	59	.....	2.057	.....
Cairo, Ill	15,995	665	2	41.575	.30
Cambridge, Ohio	13,804	36	.....	2.608	.....
Canton, Ill	13,674	315	1	23.036	.32
Canton, Ohio	62,566	48	.....	.767	.....
Cape Girardeau, Mo	11,146	13	3	1.166	23.08

[1] Cities in which no cases of this disease were reported are not included in this table.
[2] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

MEASLES—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Carbondale, Pa	19,507	45	.....	2.306	.....
Carlisle, Pa	10,795	17	.....	1.576	.....
Carnegie, Pa	11,963	15	.....	1.254	.....
Central Falls, R. I	26,101	31	.....	1.188	.....
Centralia, Ill	11,838	209	.....	17.655	.....
Chambersburg, Pa	12,475	283	.....	22.685	.....
Charleston, W. Va	31,060	85	3	2.737	3.53
Chelsea, Mass	48,405	213	1	4.400	.47
Chester, Pa	41,857	174	1	4.157	.57
Cheyenne, Wyo	[1] 11,320	101	.....	8.922	.....
Chicago Heights, Ill	22,863	602	2	26.331	.33
Chicopee, Mass	29,960	64	1	2.137	1.56
Chillicothe, Ohio	15,625	213	1	13.632	.47
Cicero, Ill	20,846	153	.....	7.340	.....
Clinton, Mass	[1] 13,075	145	.....	11.090	.....
Coatesville, Pa	14,998	44	.....	2.934	.....
Coffeyville, Kans	18,331	102	.....	5.564	.....
Cohoes, N. Y	25,292	64	1	2.530	1.56
Colorado Springs, Colo	38,965	833	.....	21.378	.....
Concord, N. H	22,858	414	.....	18.112	.....
Connellsville, Pa	15,876	29	.....	1.827	.....
Corning, N. Y	15,676	22	.....	1.403	.....
Corsicana, Tex	10,066	185	1	18.379	.54
Cortland, N. Y	13,321	654	1	49.096	.15
Council Bluffs, Iowa	31,538	121	.....	3.800	.....
Covington, Ky	59,623	55	.....	.922	.....
Cranston, R. I	26,773	20	.....	.747	.....
Crawfordsville, Ind	11,443	57	.....	4.981	.....
Cumberland, Md	26,686	145	.....	5.434	.....
Danbury, Conn	22,931	10	.....	.436	.....
Danville, Ill	32,969	361	1	10.950	.28
Davenport, Iowa	49,618	148	.....	2.983	.....
Decatur, Ill	41,483	151	.....	3.640	.....
Dedham, Mass	10,618	18	.....	1.695	.....
Dover, N. H	13,276	328	2	24.706	.61
Du Bois, Pa	14,994	246	.....	16.407	.....
Dubuque, Iowa	40,096	167	.....	4.165	.....
Duluth, Minn	97,077	647	3	6.665	.46
Dunkirk, N. Y	21,311	66	.....	3.097	.....
Dunmore, Pa	21,286	136	.....	6.389	.....
Durham, N. C	26,160	610	.....	23.318	.....
East Chicago, Ind	30,286	331	15	10.929	4.53
East Cleveland, Ohio	13,851	42	.....	3.029	.....
Easthampton, Mass	10,656	81	.....	7.601	.....
Easton, Pa	30,854	181	.....	5.866	.....
East Orange, N. J	43,761	759	2	17.344	.26
East St. Louis, Ill	77,312	550	4	7.114	.73
Eau Claire, Wis	18,887	64	.....	3.389	.....
Edwardsville, Pa	10,771	1	.....	.093	.....
Elgin, Ill	28,562	647	.....	22.652	.....
Elizabeth, N. J	88,840	288	.....	3.242	.....
Elmira, N. Y	38,272	90	.....	2.352	.....
El Paso, Tex	69,149	473	36	6.840	7.61
Elwood, Ind	[1] 11,028	104	1	9.431	.96
Elyria, Ohio	19,503	42	.....	2.154	.....
Enfield, Conn	11,924	18	6	1.510	33.33
Englewood, N. J	12,043	46	.....	3.650	.....
Erie, Pa	76,592	683	3	8.917	.44
Escanaba, Mich	15,854	9	.....	.568	.....
Eugene, Oreg	14,257	21	.....	1.473	.....
Eureka, Calif	15,142	60	.....	3.962	.....
Evanston, Ill	29,364	318	1	10.832	.31
Evansville, Ind	76,081	1,582	8	20.551	.51
Everett, Mass	40,190	282	4	7.022	1.42
Everett, Wash	37,205	845	.....	22.712	.....
Fairmont, W. Va	16,111	80	3	4.956	3.75
Fargo, N. Dak	17,872	256	3	14.324	1.17
Farrell, Pa	[1] 10,190	27	3	2.650	11.11
Findlay, Ohio	[1] 14,856	58	1	3.904	1.72
Fitchburg, Mass	42,419	198	.....	4.668	.....
Flint, Mich	57,366	462	2	8.051	.43
Fort Collins, Colo	11,973	33	.....	2.756	.....
Fort Scott, Kans	10,564	49	.....	4.638	.....
Fort Wayne, Ind	78,014	59	.....	.756	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

MEASLES—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Fostoria, Ohio	10,959	73	.....	6.661	.....
Framingham, Mass	14,149	183	1	12.934	0.55
Franklin, Pa	11,555	18	.....	1.558	.....
Frederick, Md	11,225	251	.....	22.361	.....
Freeport, Ill	19,844	273	1	13.757	.37
Fremont, Ohio	11,034	4	.....	.363	.....
Fresno, Calif	36,314	100	4	2.754	4.00
Fulton, N. Y	12,138	337	.....	27.764	.....
Galveston, Tex	42,650	41	1	.961	2.44
Gardner, Mass	17,534	57	.....	3.251	.....
Gary, Ind	56,000	241	14	4.304	5.81
Glens Falls, N. Y	17,160	169	.....	9.848	.....
Gloucester City, N. J	11,375	34	.....	2.989	.....
Gloversville, N. Y	22,314	49	.....	2.196	.....
Grand Forks, N. Dak	16,342	6	.....	.367	.....
Grand Island, Nebr	12,133	12	.....	.914	.....
Granite City, Ill	15,890	338	3	21.271	.89
Great Falls, Mont	[1] 13,948	190	.....	13.622	.....
Green Bay, Wis	30,017	13	.....	.433	.....
Greenfield, Mass	12,251	696	.....	56.812	.....
Greenville, S. C	18,574	237	3	12.760	1.27
Greenwich, Conn	19,594	450	2	22.966	.44
Hackensack, N. J	17,412	46	.....	2.642	.....
Hamilton, Ohio	41,338	82	4	1.984	4.88
Hammond, Ind	27,016	132	1	4.886	.76
Hancock, Mich	12,578	45	.....	3.578	.....
Hannibal, Mo	22,399	20	.....	.893	.....
Harrisburg, Pa	73,276	129	.....	1.760	.....
Harrison, N. J	17,345	139	.....	8.014	.....
Haverhill, Mass	49,180	157	1	3.192	.64
Hazleton, Pa	28,981	10	.....	.345	.....
Helena, Ark	11,122	84	1	7.553	1.19
Highland Park, Mich	33,859	241	1	7.118	.41
Hoboken, N. J	78,324	294	4	3.754	1.36
Holyoke, Mass	66,503	475	4	7.143	.84
Homestead, Pa	28,071	132	.....	5.721	.....
Hornell, N. Y	14,857	412	.....	27.731	.....
Hot Springs, Ark	17,690	125	3	7.066	2.40
Hudson, N. Y	12,898	89	.....	6.900	.....
Huntington, Ind	10,982	107	.....	9.743	.....
Hutchinson, Kans	21,461	1,248	3	58.152	.24
Independence, Kans	15,111	186	1	12.309	.54
Ironwood, Mich	15,095	120	.....	7.950	.....
Irvington, N. J	16,710	412	1	24.656	.24
Ithaca, N. Y	16,017	45	.....	2.810	.....
Jackson, Mich	35,996	743	1	20.641	.13
Jacksonville, Fla	79,065	2,534	12	32.050	.47
Jacksonville, Ill	15,506	255	.....	16.445	.....
Jamestown, N. Y	37,431	300	.....	8.015	.....
Janesville, Wis	14,411	53	.....	3.678	.....
Jeffersonville, Ind	[1] 10,412	28	.....	2.689	.....
Johnstown, N. Y	10,678	114	.....	10.676	.....
Joliet, Ill	38,549	417	3	10.817	.72
Joplin, Mo	33,400	163	3	4.880	1.84
Kalamazoo, Mich	50,408	1,080	20	21.425	1.85
Kankakee, Ill	14,270	224	1	15.697	.45
Kearny, N. J	24,325	240	.....	9.866	.....
Kenosha, Wis	32,833	865	2	26.345	.23
Kewanee, Ill	13,607	38	.....	2.793	.....
Kingston, N. Y	26,910	70	.....	2.601	.....
Kokomo, Ind	21,929	180	3	8.208	1.67
Lackawanna, N. Y	16,219	191	.....	11.776	.....
La Crosse, Wis	31,833	43	.....	1.351	.....
La Fayette, Ind	21,481	118	.....	5.493	.....
Lakewood, Ohio	23,813	73	.....	3.066	.....
Lancaster, Pa	51,437	347	1	6.746	.29
Lansford, Pa	10,825	69	.....	6.374	.....
Lansing, Mich	44,499	399	.....	8.966	.....
Laporte, Ind	13,572	9	.....	.663	.....
La Salle, Ill	12,332	247	1	20.029	.40
Latrobe, Pa	11,815	27	.....	2.285	.....
Laurium, Mich	10,649	3	.....	.282	.....
Leavenworth, Kans	[1] 19,363	258	.....	13.324	.....
Lebanon, Pa	20,947	50	.....	2.387	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

MEASLES—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Leominster, Mass.	21,365	39	.....	1.825	.....
Lewiston, Me.	28,061	14	.....	.499	.....
Lewistown, Pa.	11,126	36	.....	3.236	.....
Lexington, Ky.	41,997	581	1	13.834	0.17
Lima, Ohio.	37,145	63	.....	1.696	.....
Lincoln, Ill.	11,991	569	8	47.452	1.41
Lincoln, Nebr.	46,967	998	11	21.253	1.10
Little Falls, N. Y.	13,653	132	.....	9.668	.....
Logansport, Ind.	21,338	117	1	5.483	.85
Long Beach, Calif.	29,163	61	.....	2.092	.....
Long Branch, N. J.	15,733	70	.....	4.449	.....
Lorain, Ohio.	38,266	23	.....	.601	.....
Ludington, Mich.	10,566	2	1	.189	50.00
Lynchburg, Va.	33,497	249	3	7.434	1.20
McAlester, Okla.	19,398	42	.....	2.165	.....
McKeesport, Pa.	48,299	99	2	2.050	2.02
McKees Rocks, Pa.	20,795	40	.....	1.924	.....
Macon, Ga.	46,009	167	9	3.629	5.39
Madison, Wis.	31,315	75	.....	2.395	.....
Mahonoy City, Pa.	17,709	28	.....	1.581	.....
Malden, Mass.	52,243	521	1	9.973	.19
Manchester, Conn.	16,859	6	.....	.378	.....
Manchester, N. H.	79,607	183	1	2.299	.55
Manistee, Mich.	[1] 12,381	12	.....	.969	.....
Manitowoc, Wis.	13,931	3	.....	.215	.....
Mankato, Minn.	[1] 10,365	178	1	17.173	.56
Mansfield, Ohio.	23,051	410	.....	17.787	.....
Marinette, Wis.	[1] 14,610	12	.....	.821	.....
Marion, Ind.	19,925	133	5	6.676	3.76
Marlboro, Mass.	15,285	17	.....	1.112	.....
Marquette, Mich.	12,565	27	.....	2.151	.....
Martinsburg, W. Va.	12,984	19	.....	1.463	.....
Mason City, Iowa.	14,538	26	.....	1.741	.....
Massillon, Ohio.	15,569	84	1	5.416	1.19
Maywood, Ill.	10,903	183	.....	16.784	.....
Medford, Mass.	26,681	471	.....	17.653	.....
Medford, Oreg.	14,932	175	1	11.720	.57
Melrose, Mass.	17,724	290	2	16.362	.69
Meriden, Conn.	29,431	102	4	3.466	3.92
Methuen, Mass.	14,320	7	.....	.489	.....
Michigan City, Ind.	21,913	129	1	5.887	.78
Middletown, N. Y.	15,890	115	.....	7.237	.....
Middletown, Ohio.	16,384	94	2	5.127	2.13
Milford, Mass.	14,280	20	.....	1.401	.....
Millville, N. J.	13,813	352	.....	25.483	.....
Mishawaka, Ind.	17,083	10	.....	.585	.....
Missoula, Mont.	19,075	50	.....	2.621	.....
Mobile, Ala.	59,201	118	13	7.081	3.11
Moline, Ill.	27,976	110	1	3.932	.91
Monessen, Pa.	23,070	50	.....	2.167	.....
Montclair, N. J.	27,087	88	1	3.249	1.14
Montgomery, Ala.	44,039	443	2	10.059	.45
Morgantown, W. Va.	11,144	246	.....	17.031	.....
Morristown, N. J.	13,410	33	.....	2.461	.....
Moundsville, W. Va.	11,513	15	.....	1.303	.....
Mount Vernon, N. Y.	37,991	318	2	8.370	.63
Mount Vernon, Ohio.	10,827	17	.....	1.570	.....
Muncie, Ind.	25,653	452	.....	17.620	.....
Muscatine, Iowa.	17,713	446	1	25.173	.22
Muskegon, Mich.	27,134	97	.....	3.576	.....
Nanticoke, Pa.	23,811	7	.....	.294	.....
Nashua, N. H.	27,541	631	2	22.911	.32
Natick, Mass.	10,140	24	.....	2.367	.....
New Albany, Ind.	23,629	293	8	12.400	2.73
New Britain, Conn.	55,385	40	.....	.722	.....
New Brunswick, N. J.	25,855	43	.....	1.663	.....
Newburgh, N. Y.	29,893	689	1	23.049	.15
Newburyport, Mass.	15,291	349	1	22.824	.29
New Castle, Ind.	14,144	16	.....	1.131	.....
New Castle, Pa.	41,915	101	.....	2.410	.....
New London, Conn.	21,199	81	.....	3.821	.....
Newport News, Va.	22,622	280	2	12.377	.71
Newport, R. I.	30,585	210	.....	6.866	.....
New Rochelle, N. Y.	39,192	237	.....	6.047	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

MEASLES—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Newton, Mass	44,345	364	.....	8.208	.....
Niagara Falls, N. Y	38,466	588	4	15.286	0.68
Norristown, Pa	31,969	25	.....	.782	.....
North Adams, Mass	[1] 22,019	435	.....	19.756	.....
Northampton, Mass	20,006	285	1	14.246	.35
North Attleboro, Mass	11,248	15	.....	1.334	.....
North Braddock, Pa	15,684	203	.....	12.943	.....
North Tonawanda, N. Y	14,060	5	1	.356	20.00
North Yakima, Wash	22,058	675	3	30.601	.44
Norwalk, Conn	27,332	25	1	.915	4.00
Norwich, Conn	21,923	77	.....	3.512	.....
Norwood, Ohio	23,249	69	.....	2.965	.....
Oak Park, Ill	27,816	448	1	16.106	.22
Ogden, Utah	32,343	724	1	22.385	.14
Oil City, Pa	20,162	22	.....	1.091	.....
Oklahoma City, Okla	97,588	976	10	10.001	1.02
Orange, N. J	33,636	106	.....	3.151	.....
Oshkosh, Wis	36,549	24	.....	.657	.....
Ossining, N. Y	14,064	6	.....	.427	.....
Oswego, N. Y	24,219	6	.....	.248	.....
Owosso, Mich	10,326	49	.....	4.745	.....
Paducah, Ky	25,178	1,163	1	46.191	.09
Parkersburg, W. Va	21,059	240	1	11.397	.42
Pasadena, Calif	49,620	134	.....	2.701	.....
Passaic, N. J	74,478	71	.....	.953	.....
Pawtucket, R. I	60,666	18	1	.297	5.56
Peabody, Mass	18,785	19	.....	1.011	.....
Peekskill, N. Y	19,034	217	.....	11.401	.....
Pekin, Ill	10,973	16	.....	1.458	.....
Peoria, Ill	72,184	1,401	9	19.450	.64
Perth Amboy, N. J	42,646	98	.....	2.298	.....
Peru, Ind	12,491	31	.....	2.482	.....
Petersburg, Va	25,817	51	1	1.975	1.96
Phoenixville, Pa	11,871	25	.....	2.106	.....
Pine Bluff, Ark	17,777	42	.....	2.363	.....
Piqua, Ohio	14,275	9	.....	.630	.....
Pittsfield, Mass	39,678	514	2	12.954	.39
Pittston, Pa	18,975	14	.....	.738	.....
Plainfield, N. J	24,330	51	.....	2.096	.....
Plymouth, Mass	14,001	16	.....	1.142	.....
Plymouth, Pa	19,439	9	.....	.463	.....
Pomona, Calif	13,624	15	.....	1.101	.....
Pontiac, Mich	18,006	257	.....	14.273	.....
Port Huron, Mich	[1] 18,863	238	1	12.617	.42
Portland, Me	64,720	1,380	11	21.323	.80
Portsmouth, N. H	11,790	37	.....	3.154	.....
Portsmouth, Va	40,693	320	1	7.864	.31
Pottsville, Pa	22,717	10	.....	.440	.....
Poughkeepsie, N. Y	30,786	21	.....	.682	.....
Provo, Utah	10,923	224	.....	20.507	.....
Pueblo, Colo	56,084	1,126	25	20.077	2.22
Punxsutawney (Gtr.), Pa	10,745	21	1	1.954	4.76
Quincy, Ill	36,832	191	5	5.186	2.62
Quincy, Mass	39,022	124	.....	3.178	.....
Racine, Wis	47,465	22	1	.463	4.55
Rahway, N. J	10,361	8	.....	.772	.....
Raleigh, N. C	20,274	375	2	18.497	.53
Redlands, Calif	14,573	116	.....	7.960	.....
Reno, Nev	15,514	464	2	29.908	.43
Richmond, Ind	25,086	342	.....	13.636	.....
Roanoke, Va	46,282	1,009	9	21.801	.89
Rockford, Ill	56,739	394	.....	6.944	.....
Rock Island, Ill	29,452	75	.....	2.547	.....
Rocky Mount, N. C	12,673	508	1	40.085	.20
Rome, Ga	15,607	75	2	4.806	2.67
Rome, N. Y	24,259	450	7	18.550	1.56
Rutland, Vt	15,038	144	1	9.576	.69
Sacramento, Calif	68,964	201	2	2.914	1.00
Saginaw, Mich	56,469	87	.....	1.541	.....
St. Joseph, Mo	86,498	94	.....	1.087	.....
Salem, Mass	49,346	229	1	4.641	.44
Salem, Oreg	21,274	269	.....	12.645	.....
San Bernardino, Calif	17,616	41	.....	2.327	.....
San Diego, Calif	56,412	929	1	16.468	.11

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

MEASLES—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases
Sandusky, Ohio	20,226	113	.....	5.587	.....
Sanford, Me	11,217	16	.....	1.426	.....
San Jose, Calif	29,510	29	2	7.982	6.90
Santa Ana, Calif	10,961	45	.....	4.105	.....
Santa Barbara, Calif	15,240	25	.....	1.640	.....
Saratoga Springs, N. Y	13,839	18	.....	1.301	.....
Sault Ste. Marie, Mich	14,191	105	3	7.401	2.86
Selma, Ala	15,945	27	4	1.693	14.81
Sharon, Pa	19,156	26	1	1.357	3.85
Shawnee, Okla	19,651	16	6	.713	37.50
Sheboygan, Wis	29,457	5	1	.173	20.00
Shelbyville, Ind	11,291	12	.....	1.071	.....
Shreveport, La	37,024	34	.....	.917	.....
Sioux Falls, S. Dak	17,152	29	.....	1.717	.....
Somerville, Mass	79,664	260	2	3.261	.77
South Bend, Ind	70,983	295	.....	4.155	.....
South Bethlehem, Pa	24,436	58	.....	2.371	.....
Southbridge, Mass	14,465	3	.....	.207	.....
Spartansburg, S. C	21,265	257	9	21.242	1.95
Springfield, Ill	63,623	223	.....	3.503	.....
Springfield, Ohio	53,929	570	5	11.072	.88
Stamford, Conn	11,310	157	.....	14.387	.....
Steelton, Pa	17,789	31	.....	1.736	.....
Steubenville, Ohio	29,229	2	.....	.071	.....
Stockton, Calif	39,632	75	.....	1.892	.....
Streator, Ill	14,313	27	.....	1.886	.....
Superior, Wis	47,167	20	1	.424	5.00
Tamaqua, Pa	11,162	2	.....	.185	.....
Tampa, Fla	51,251	271	3	12.213	.84
Taunton, Mass	37,509	23	2	.613	8.70
Taylor, Pa	12,763	12	.....	1.731	.....
Terre Haute, Ind	67,331	114	1	1.224	.14
Tiffin, Ohio	12,962	314	2	24.223	.64
Topeka, Kans	49,535	93	4	19.465	.82
Trinidad, Colo	14,413	13	1	15.185	.66
Troy, N. Y	77,104	1,321	11	15.329	.83
Tucson, Ariz	17,324	24	.....	1.385	.....
Tuscaloosa, Ala	10,322	29	3	27.347	1.03
Utica, N. Y	96,322	270	4	2.912	1.52
Vallejo, Calif	13,453	24	1	6.510	1.66
Vancouver, Wash	13,365	75	.....	5.567	.....
Virginia, Minn	15,951	94	.....	6.146	.....
Waco, Tex	34,013	31	3	.911	9.68
Walla Walla, Wash	29,757	170	2	3.569	2.00
Waltham, Mass	31,911	179	2	5.633	.93
Warren, Ohio	13,111	17	.....	1.125	.....
Washington, Pa	25,822	281	.....	11.357	.....
Waterbury, Conn	91,715	71	1	.722	1.47
Watertown, Mass	36,064	154	.....	4.192	.....
Watertown, N. Y	33,742	121	.....	9.942	.....
Waukegan, Ill	19,226	347	51	2.456	.....
Wausau, Wis	19,488	112	.....	5.747	.....
West Chester, Pa	13,713	72	.....	5.252	.....
Westfield, Mass	15,000	1	13	34.475	2.38
West Hoboken, N. J	44,000	193	1	4.386	.51
West New York, N. J	19,000	63	.....	3.316	.....
Westerly, R. I	17,000	65	.....	4.154	.....
Wheeling, W. Va	43,000	157	1	3.605	.63
White Plains, N. Y	31,000	173	.....	7.415	.....
Wichita Falls, Tex	12,000	19	.....	1.583	.....
Wilkes-Barre, Pa	73,833	1,436	3	24.635	.21
Williamsport, Pa	31,924	449	3	5.617	.67
Wilmington, Del	110,168	11	1	.415	9.09
Wilmington, N. C	33,372	115	1	19.765	.87
Winchendon, Mass	10,812	32	.....	2.959	.....
Winona, Minn	17,263	5	.....	.289	.....
Winston-Salem, N. C	33,136	95	3	22.865	.32
Winthrop, Mass	13,105	119	.....	9.080	.....
Woburn, Mass	16,076	83	.....	5.163	.....
Zanesville, Ohio	31,320	60	.....	1.916	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

PELLAGRA.[1]

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Albuquerque, N. Mex	14,509	1	1	0.069	100.00
Amarillo, Tex	20,882	2	.....	.096	.....
Ann Arbor, Mich	15,041	1	1	.066	100.00
Anniston, Ala	14,326	7	4	.489	57.14
Appleton, Wis	18,005	1	1	.056	100.00
Augusta, Me	14,825	4	3	.279	75.00
Beaumont, Tex	28,851	5	5	.173	100.00
Bessemer, Ala	17,156	20	16	1.166	80.00
Brunswick, Ga	10,984	12	7	1.092	58.33
Chelsea, Mass	48,405	1	.....	.021	.....
Cleburne, Tex	12,553	2	2	.159	100.00
Coffeyville, Kans	18,331	1	1	.055	100.00
Colorado Springs, Colo	38,965	1	1	.026	100.00
Concord, N. H	22,858	2	2	.087	100.00
Corsicana, Tex	10,066	35	9	3.477	25.71
Cortland, N. Y	13,321	2	2	.150	100.00
Decatur, Ill	41,483	1	1	.024	100.00
Durham, N.C	26,160	6	13	.....	.....
Greenville, S. C	18,574	8	5	.431	62.50
Helena, Ark	11,122	106	12	9.531	11.32
Hot Springs, Ark	17,690	20	8	1.131	40.00
Hutchinson, Kans	21,461	1	.....	.047	.....
Independence, Kans	15,111	1	1	.066	100.00
Jacksonville, Fla	79,065	27	22	.341	81.48
Joplin, Mo	38,400	1	2	.....	.....
Kalamazoo, Mich	50,408	2	2	.040	100.00
Long Beach, Calif	29,163	1	1	.034	100.00
McAlester, Okla	19,398	5	1	.258	20.00
Malden, Mass	52,243	1	1	.019	100.00
Milford, Mass	14,280	1	1	.070	100.00
Mobile, Ala	59,201	64	57	1.081	89.06
Montgomery, Ala	44,039	26	48	.....	.....
Natick, Mass	10,140	1	.....	.099	.....
Northampton, Mass	20,006	2	.....	.100	.....
Peabody, Mass	18,785	1	1	.053	100.00
Pekin, Ill	10,973	2	1	.182	50.00
Petersburg, Va	25,817	1	10	.....	.....
Pine Bluff, Ark	17,777	2	.....	.113	.....
Pomona, Calif	13,624	2	1	.147	50.00
Raleigh, N. C	20,274	27	34	.....	.....
Roanoke, Va	46,282	6	6	.130	100.00
Rocky Mount, N. C	12,673	1	1	.079	100.00
Rutland, Vt	15,038	1	1	.066	100.00
Sacramento, Calif	68,984	1	1	.014	100.00
San Bernardino, Calif	17,616	1	1	.057	100.00
San Diego, Calif	56,412	1	1	.018	100.00
Selma, Ala	15,945	15	11	.941	73.33
Shreveport, La	37,064	7	29	.....	.....
Somerville, Mass	88,618	1	.....	.011	.....
Spartanburg, S. C	21,985	30	24	1.365	80.00
Springfield, Ill	62,623	1	1	.016	100.00
Taunton, Mass	36,610	2	2	.055	100.00
Texarkana, Tex	13,099	1	.....	.076	.....
Topeka, Kans	49,538	3	3	.061	100.00
Tuscaloosa, Ala	10,824	14	7	1.293	50.00
Waco, Tex	34,015	5	9	.....	.....
Wichita Falls, Tex	12,749	3	.....	.235	.....
Wichita, Kans	73,597	3	2	.041	66.67
Wilmington, N. C	30,400	29	15	.954	51.72
Winston-Salem, N. C	33,136	31	22	.936	70.97

[1] Cities in which no cases of this disease were reported are not included in this table.

Pay in taxes or receive in interest on Victory Bonds.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

POLIOMYELITIS (INFANTILE PARALYSIS).[1]

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Adrian, Mich	11,570	1	.....	0.086	.....
Akron, Ohio	93,604	52	19	.556	36.54
Alexandria, Va	17,939	1	1	.056	100.00
Alton, Ill	23,783	1	.....	.042	.....
Altoona, Pa	59,712	2	1	.033	50.00
Amarillo, Tex	20,882	1	.....	.048	.....
Amesbury, Mass	10,200	1	.....	.098	.....
Anderson, Ind	24,230	1	.....	.041	.....
Ann Arbor, Mich	15,041	5	.....	.333	.....
Asheville, N. C	25,656	1	.....	.039	.....
Ashtabula, Ohio	22,008	1	.....	.045	.....
Auburn, N. Y	37,823	1	.....	.026	.....
Aurora, Ill	34,795	2	1	.057	50.00
Barberton, Ohio	14,187	1	.....	.070	.....
Barre, Vt	12,401	27	1	2.177	3.70
Batavia, N. Y	13,595	1	.....	.074	.....
Battle Creek, Mich	30,159	5	3	.166	60.00
Bay City, Mich	48,390	1	1	.021	100.00
Bayonne, N. J	72,204	1	.....	.014	.....
Bellingham, Wash	34,362	4	1	.116	25.00
Benton Harbor, Mich	11,099	3	1	.270	33.33
Berkeley, Calif	60,427	4	.....	.066	.....
Beverly, Mass	22,128	4	2	.181	50.00
Billings, Mont	15,123	1	.....	.066	.....
Binghamton, N. Y	54,864	1	1	.018	100.00
Braddock, Pa	22,060	1	.....	.045	.....
Bristol, Conn	16,318	3	.....	.184	.....
Brockton, Mass	60,152	6	.....	.067	.....
Burlington, Vt	21,802	1	.....	.046	.....
Butler, Pa	28,677	1	.....	.035	.....
Cambridge, Ohio	13,804	3	.....	.217	.....
Canton, Ohio	62,566	7	2	.112	28.57
Carnegie, Pa	11,963	1	.....	.084	.....
Cedar Rapids, Iowa	38,033	1	.....	.026	.....
Charleston, W. Va	31,060	2	1	.064	50.00
Chelsea, Mass	48,405	1	1	.021	100.00
Chester, Pa	41,857	2	.....	.048	.....
Chicago Heights, Ill	22,863	16	5	.700	31.25
Chicopee, Mass	29,950	1	.....	.033	.....
Clinton, Iowa	27,678	1	1	.036	100.00
Coatesville, Pa	14,998	1	.....	.067	.....
Colorado Springs, Colo	38,965	1	.....	.026	.....
Columbus, Ga	26,306	1	.....	.038	.....
Covington, Ky	59,623	4	.....	.067	.....
Cranston, R. I	26,773	2	.....	.075	.....
Cumberland, Md	26,686	2	.....	.075	.....
Cumberland, R. I	10,988	1	.....	.091	.....
Danville, Ill	32,969	1	.....	.030	.....
Danville, Va	20,183	2	.....	.099	.....
Davenport, Iowa	49,618	52	14	1.048	26.92
Decatur, Ill	41,483	1	1	.024	100.00
Dubuque, Iowa	40,096	1	2	.....	.....
Duluth, Minn	97,077	1	.....	.010	.....
Dunkirk, N. Y	21,311	1	.....	.047	.....
Durham, N. C	26,160	1	.....	.038	.....
East Chicago, Ind	30,286	6	3	.198	50.00
Easton, Pa	30,554	1	.....	.032	.....
East Orange, N. J	43,761	2	1	.046	50.00
East Providence, R. I	18,485	1	.....	.054	.....
East St. Louis, Ill	77,312	5	1	.065	20.00
Elizabeth, N. J	88,830	2	1	.022	50.00
El Paso, Tex	69,149	1	.....	.014	.....
Elyria, Ohio	19,505	1	.....	.051	.....
Enfield, Conn	11,924	5	.....	.419	.....
Erie, Pa	76,592	10	1	.131	10.00
Evanston, Ill	29,304	2	2	.068	100.00
Evansville, Ind	76,981	1	1	.013	100.00
Everett, Mass	40,160	1	1	.025	100.00
Everett, Wash	37,205	1	.....	.027	.....
Fairmont, W. Va	16,111	18	6	1.117	33.33
Farrell, Pa	[2]10,190	6	2	.589	33.33

[1] Cities in which no cases of this disease were reported are not included in this table.
[2] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Flint, Mich.	57,386	2	.....	0.035	.....
Fort Wayne, Ind.	78,014	1	.....	.018	.....
Freeport, Ill.	19,844	2	.....	.101	.....
Fremont, Ohio.	11,034	1	.....	.091	.....
Galesburg, Ill.	24,629	2	1	.081	50.00
Gardner, Mass.	17,534	1	.....	.057	.....
Gary, Ind.	56,000	1	1	.018	100.00
Gloucester City, N. J.	11,375	1	.....	.088	.....
Gloversville, N. Y.	22,314	1	1	.045	100.00
Grand Forks, N. Dak.	16,342	1	.....	.061	.....
Great Falls, Mont.	[1] 13,948	8	.....	.574	.....
Greenfield, Mass.	12,251	1	1	.082	100.00
Greenwich, Conn.	19,594	1	1	.051	100.00
Hammond, Ind.	27,016	5	.....	.185	.....
Harrisburg, Pa.	73,276	4	.....	.055	.....
Haverhill, Mass.	49,180	39	2	.793	5.13
Hazleton, Pa.	28,981	2	.....	.069	.....
Hibbing, Minn.	17,550	2	.....	.114	.....
Hudson, N. Y.	12,898	3	1	.233	33.33
Independence, Mo.	11,964	9	1	.752	11.11
Iowa City, Iowa.	11,626	2	1	.172	50.00
Irvington, N. J.	16,710	1	1	.060	100.00
Ithaca, N. Y.	16,017	1	1	.062	100.00
Jackson, Mich.	35,986	1	1	.028	100.00
Jamestown, N. Y.	37,431	2	1	.053	50.00
Janesville, Wis.	14,411	1	.....	.069	.....
Joliet, Ill.	38,549	4	.....	.104	.....
Kankakee, Ill.	14,270	2	.....	.140	.....
Kearny, N. J.	24,325	2	1	.082	50.00
Kenosha, Wis.	32,833	2	.....	.061	.....
Kewanee, Ill.	13,607	2	.....	.147	.....
La Crosse, Wis.	31,833	1	.....	.032	.....
La Fayette, Ind.	21,481	2	1	.093	50.00
Lakewood, Ohio.	23,813	1	1	.042	100.00
Lancaster, Pa.	51,437	4	.....	.078	.....
Lansford, Pa.	10,825	1	.....	.092	.....
Lansing, Mich.	44,499	4	.....	.090	.....
La Salle, Ill.	12,332	1	1	.081	100.00
Leavenworth, Kans.	[1] 19,363	1	1	.052	100.00
Lima, Ohio.	37,145	2	2	.054	100.00
Lincoln, Nebr.	46,957	4	1	.085	25.00
Long Beach, Calif.	29,163	1	.....	.034	.....
Lorain, Ohio.	38,286	1	.....	.026	.....
Ludington, Mich.	10,516	1	.....	.095	.....
McAlester, Okla.	19,398	1	.....	.052	.....
McKees Rocks, Pa.	20,795	1	.....	.048	.....
Mahanoy City, Pa.	17,709	2	1	.113	50.00
Malden, Mass.	52,243	3	2	.057	66.67
Manchester, N. H.	79,407	1	.....	.013	.....
Mansfield, Ohio.	23,051	1	1	.043	100.00
Marion, Ind.	19,923	1	1	.050	100.00
Marlboro, Mass.	15,285	1	.....	.065	.....
Martinsburg, W. Va.	12,984	2	.....	.154	.....
Massillon, Ohio.	15,503	2	.....	.129	.....
Maywood, Ill.	10,903	8	2	.734	25.00
Medford, Mass.	26,681	1	.....	.037	.....
Mishawaka, Ind.	17,083	1	.....	.059	.....
Mobile, Ala.	59,201	1	.....	.017	.....
Moline, Ill.	27,956	8	3	.286	37.50
Montclair, N. J.	27,087	3	.....	.111	.....
Montgomery, Ala.	44,039	1	.....	.023	.....
Morgantown, W. Va.	14,419	2	1	.138	50.00
Moundsville, W. Va.	11,513	2	1	.174	50.00
Muskegon, Mich.	27,434	1	1	.036	100.00
Nashua, N. H.	27,541	1	1	.036	100.00
Natick, Mass.	10,140	1	1	.099	100.00
New Brunswick, N. J.	25,855	4	.....	.155	.....
Newburgh, N. Y.	29,803	2	.....	.067	.....
New Castle, Pa.	41,915	45	8	1.074	17.78
Newport News, Va.	22,622	2	1	.088	50.00
Newport, R. I.	30,585	1	.....	.033	.....
Newton, Mass.	44,345	2	.....	.045	.....
Niagara Falls, N. Y.	38,466	4	.....	.104	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Norristown, Pa.	31 962	1	1	0.031	100.00
Northampton, Mass.	2 36	2		.100	
Oak Park, Ill.	2 5	5	2	.180	40.00
Oil City, Pa.	2 2	1		.050	
Oklahoma City, Okla.	9	2		.020	
Olean, N. Y.	1	1	3		
Orange, N. J.	3 63	1	1	.030	100.00
Ottumwa, Iowa.	2	3		.121	
Parkersburg, W. Va.	21	11	1	.522	9.09
Passaic, N. J.	7	1		.013	
Peabody, Mass.	1	1		.033	
Peoria, Ill.	7	1	1	.014	100.00
Perth Amboy, N. J.	4	2		.047	
Petersburg, Va.	3	1	4		
Pine Bluff, Ark.	1	1		.014	
Pomona, Calif.	1	1		.077	
Portland, Me.	6	1		.015	
Portsmouth, N. H.	1	1		.095	
Portsmouth, Ohio.	2	1		.034	
Pueblo, Colo.	5	2		.035	
Punxsutawney Greater.), Pa.	1	1		.083	
Quincy, Ill.	3	2		.054	
Quincy, Mass.	3	2	1	.051	50.00
Racine, Wis.	4	2	2	.042	100.00
Rahway, N. J.	1	1	1	.090	100.00
Richmond, Ind.	2	1	1	.040	100.00
Rockford, Ill.	5	1		.018	
Rock Island, Ill.	2	9	4	.316	44.44
Rocky Mount, N. C.	1	1		.079	
Saginaw, Mich.	5	1		.019	
Salem, Mass.	4 3	1	1	.030	100.00
San Diego, Calif.	5	3		.061	
Saratoga Springs, N. Y.	1	1		.072	
Sedalia, Mo.	1	1		.051	
Sharon, Pa.	1	2		.124	
Sioux City, Iowa.	5	7	2	.130	28.57
Somerville, Mass.	2	3		.084	
Spartanburg, S. C.	2	1		.045	
Springfield, Ill.	4	2		.082	
Stamford, Conn.	3	1	1	.031	100.00
Steubenville, Ohio.	3	1		.033	
Streator, Ill.	1	1	1	.030	100.00
Superior, Wis.	4	1	1	.031	100.00
Terre Haute, Ind.	3	1		.015	
Topeka, Kans.	1	1		.030	
Trinidad, Colo.	1	1		.000	
Troy, N. Y.	3	3		.000	
Warren, Pa.	1	1		.000	
Waterbury, Conn.	2	2		.022	
Waterloo, Iowa.	3	1		.027	
Watertown, N. Y.	3	1	1	.033	100.00
Wauwatosa, Wis.	1	2		.000	
West New York, N. J.	1	1		.051	
Wheeling, W. Va.	4	3	1	.000	33.33
White Plains, N. Y.	1	1	1	.014	100.00
Williamsport, Pa.	2	2		.054	
Winslow, Me.	1	1		.054	
Woburn, Mass.	1	1	1	.032	100.00
Zanesville, Ohio.	2	3		.000	

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

RABIES IN ANIMALS.

City.	Cases reported.	City.	Cases reported.
Akron, Ohio	4	Kearny, N. J	3
Alameda, Calif	1	McAlester, Okla	6
Albuquerque, N. Mex	30	Marshall, Tex	4
Ann Arbor, Mich	1	Montclair, N. J	1
Atlantic City, N. J	8	Mount Vernon, N. Y	1
Attleboro, Mass	1	Nanticoke, Pa	10
Bedford, Ind	1	New Britain, Conn	19
Belleville, N. J	1	Niagara Falls, N. Y	27
Bloomfield, N. J	5	North Tonawanda, N.	4
Brookline, Mass	1	Norwood, Ohio	1
Cairo, Ill	9	Orange, N. J	4
Central Falls, R. I	1	Passaic, N. J	1
Cranston, R. I	2	Pittsfield, Mass	1
Danville, Va	2	Rahway, N. J	1
East Cleveland, Ohio	4	Saginaw, Mich	6
East Orange, N. J	1	Santa Cruz, Calif	2
Elizabeth, N. J	1	Spartanburg, S. C	3
Erie, Pa	50	Stockton, Calif	1
Fresno, Calif	5	Trinidad, Colo	3
Greenville, Tex	8	Troy, N. Y	1
Greenwich, Conn	2	Warren, Ohio	4
Hot Springs, Ark	2	West New York, N. J	1
Jacksonville, Fla	17	West Orange, N. J	1
Joplin, Mo	2	Wichita Falls, Tex	10
Kankakee, Ill	2		

RABIES IN MAN.

City.	Cases reported.	Deaths registered.	City.	Cases reported.	Deaths registered.
Ann Arbor, Mich	1	1	New Britain, Conn	1	1
Danbury, Conn	1	1	New Castle, Ind	1	1
Greenville, S. C	1	1	Norwood, Ohio	1	1
Helena, Ark	1	1	Petersburg, Va		2
Jacksonville, Fla	1	1	Raleigh, N. C		1
Joplin, Mo	2	2	Waco, Tex		1
Marshall, Tex	1	1	West Orange, N. J	1	1
Montgomery, Ala		1			

SCARLET FEVER.[1]

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Aberdeen, S. Dak	15,926	2		0.126	
Aberdeen, Wash	21,392	3		.140	
Adams, Mass	14,406	5		.347	
Adrian, Mich	11,570	28	1	2.420	3.57
Akron, Ohio	93,604	172	2	1.838	1.16
Alameda, Calif	28,433	224	3	7.878	1.34
Albuquerque, N. Mex	14,509	21	1	1.447	4.76
Alexandria, La	16,232	2		.123	
Alexandria, Va	17,939	7		.390	
Alpena, Mich	13,365	29	1	2.170	3.45
Alton, Ill	23,783	10		.420	
Altoona, Pa	59,712	64	2	1.072	3.12
Amarillo, Tex	20,882	11		.527	
Amesbury, Mass	10,200	10	1	.980	10.00
Amsterdam, N. Y	38,043	5		.131	
Anaconda, Mont	10,631	2	2	.188	100.00
Anderson, Ind	24,230	52		2.146	
Ann Arbor, Mich	15,041	144	2	9.574	1.39
Anniston, Ala	14,326	32		2.234	
Ansonia, Conn	16,954	2	1	.118	50.00

[1] Cities in which no cases of this disease were reported are not included in this table.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SCARLET FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Appleton, Wis.	18,005	30	.....	1.666	.....
Arlington, Mass.	13,073	41	1	3.136	2.44
Asbury Park, N. J.	14,629	45	.....	3.076	.....
Asheville, N. C.	25,656	25	.....	.974	.....
Ashland, Ky.	12,195	75	2	6.150	2.67
Ashtabula, Ohio.	22,008	10	.....	.454	.....
Astoria, Oreg.	10,487	37	1	3.528	2.70
Atchison, Kans.	16,785	15	.....	.894	.....
Atlantic City, N. J.	59,515	56	.....	.941	.....
Attleboro, Mass.	19,776	39	.....	1.972	.....
Auburn, N. Y.	37,823	36	.....	.952	.....
Augusta, Me.	14,325	1	.....	.070	.....
Aurora, Ill.	34,795	231	3	6.639	1.30
Austin, Tex.	35,612	22	.....	.618	.....
Bakersfield, Calif.	17,543	47	.....	2.679	.....
Bangor, Me.	26,958	7	1	.260	14.29
Barberton, Ohio.	14,187	20	.....	1.410	.....
Barre, Vt.	12,401	29	.....	2.339	.....
Batavia, N. Y.	13,595	44	.....	3.236	.....
Battle Creek, Mich.	30,159	162	3	5.372	1.85
Bay City, Mich.	48,390	96	2	1.984	2.08
Bayonne, N. J.	72,204	87	.....	1.205	.....
Beatrice, Nebr.	10,437	13	1	1.246	7.69
Beaumont, Tex.	28,851	1	.....	.035	.....
Beaver Falls, Pa.	13,749	7	.....	.509	.....
Bedford, Ind.	10,613	7	.....	.660	.....
Bellaire, Ohio.	14,575	58	3	3.979	5.17
Belleville, N. J.	12,797	25	.....	1.954	.....
Bellingham, Wash.	34,362	9	.....	.262	.....
Beloit, Wis.	18,547	26	1	1.402	3.85
Benton Harbor, Mich.	11,089	43	.....	3.878	.....
Berkeley, Calif.	60,427	92	1	1.522	1.09
Berlin, N. H.	13,892	1	.....	.072	.....
Bessemer, Ala.	17,156	13	.....	.758	.....
Bethlehem, Pa.	14,353	24	.....	1.672	.....
Beverly, Mass.	22,128	25	.....	1.130	.....
Billings, Mont.	15,123	35	2	2.314	5.71
Binghamton, N. Y.	54,864	197	1	3.591	.51
Bloomfield, N. J.	19,013	29	.....	1.525	.....
Bloomington, Ind.	11,661	18	.....	1.544	.....
Boise, Idaho.	35,951	8	.....	.223	.....
Braddock, Pa.	22,060	18	.....	.816	.....
Bradford, Pa.	[1] 14,544	9	.....	.619	.....
Brazil, Ind.	10,472	11	.....	1.050	.....
Bridgeton, N. J.	14,425	14	[a] 1	.971	7.14
Bristol, Conn.	16,318	44	.....	2.696	.....
Bristol, Pa.	10,826	1	.....	.092	.....
Brockton, Mass.	69,152	61	.....	.882	.....
Brookline, Mass.	33,526	59	.....	1.760	.....
Brunswick, Ga.	10,984	1	.....	.091	.....
Burlington, Iowa.	25,144	61	2	2.426	3.28
Burlington, Vt.	21,802	15	.....	.688	.....
Butler, Pa.	28,677	50	.....	1.744	.....
Cairo, Ill.	15,995	6	.....	.375	.....
Cambridge, Ohio.	13,804	4	.....	.290	.....
Canton, Ill.	13,674	4	.....	.293	.....
Canton, Ohio.	62,566	153	.....	2.445	.....
Cape Girardeau, Mo.	11,146	3	.....	.269	.....
Carbondale, Pa.	19,597	26	.....	1.327	.....
Carlisle, Pa.	10,795	7	.....	.649	.....
Carnegie, Pa.	11,963	7	.....	.585	.....
Cedar Rapids, Iowa.	38,033	56	1	1.472	1.79
Central Falls, R. I.	26,101	26	.....	.996	.....
Centralia, Ill.	11,838	10	.....	.845	.....
Chambersburg, Pa.	12,475	10	.....	.802	.....
Charleston, S. C.	61,041	33	1	.541	3.03
Charleston, W. Va.	31,060	31	2	.998	6.45
Chelsea, Mass.	46,405	41	.....	.847	.....
Chester, Pa.	41,857	25	.....	.597	.....
Cheyenne, Wyo.	[1] 11,320	104	5	9.187	4.81
Chicago Heights, Ill.	22,863	106	.....	4.636	.....
Chicopee, Mass.	29,970	31	.....	1.035	.....
Chillicothe, Ohio.	15,625	35	.....	2.240	.....
Cicero, Ill.	20,846	151	.....	7.244	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SCARLET FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Cleburne, Tex	12,553	7	.....	0.558	.....
Clinton, Iowa	27,678	36	1	1.301	2.78
Clinton, Mass	[1] 13,075	16	.....	1.224	.....
Coatesville, Pa	14,998	14	.....	.933	.....
Coffeyville, Kans	18,331	6	.....	.327	.....
Cohoes, N. Y	25,292	8	.....	.316	.....
Colorado Springs, Colo	38,965	74	1	1.899	1.35
Columbus, Ga	26,306	14	2	.532	14.29
Concord, N. H	22,858	47	.....	2.056	.....
Connellsville, Pa	15,876	19	.....	1.197	.....
Corning, N. Y	15,676	11	1	.702	9.09
Corsicana, Tex	10,066	6	.....	.596	.....
Cortland, N. Y	13,321	12	1	.901	8.33
Coshocton, Ohio	11,887	7	.....	.589	.....
Council Bluffs, Iowa	31,838	105	6	3.298	5.71
Covington, Ky	59,623	64	2	1.073	3.13
Cranston, R. I	26,773	55	.....	2.054	.....
Cumberland, Md	26,686	9	.....	.337	.....
Danbury, Conn	22,931	26	.....	1.134	.....
Danville, Ill	32,969	41	.....	1.244	.....
Danville, Va	20,183	37	.....	1.833	.....
Davenport, Iowa	49,618	190	3	3.829	1.58
Decatur, Ill	41,483	56	1	1.350	1.79
Dedham, Mass	10,618	16	.....	1.507	.....
Du Bois, Pa	14,994	25	.....	1.667	.....
Dubuque, Iowa	40,096	47	.....	1.172	.....
Duluth, Minn	97,077	221	7	2.277	3.17
Dunkirk, N. Y	21,311	9	.....	.422	.....
Dunmore, Pa	21,286	22	.....	1.034	.....
Durham, N. C	26,160	17	.....	.650	.....
East Chicago, Ind	30,286	86	4	2.840	4.65
East Cleveland, Ohio	13,864	40	.....	2.885	.....
Easthampton, Mass	10,656	10	2	.938	20.00
Easton, Pa	30,854	9	.....	.292	.....
East Orange, N. J	43,761	72	.....	1.645	.....
East Providence, R. I	18,485	22	1	1.190	4.55
East St. Louis, Ill	77,312	70	1	.905	1.43
Eau Claire, Wis	18,887	48	.....	2.541	.....
Edwardsville, Pa	10,771	5	.....	.464	.....
Elgin, Ill	28,562	77	2	2.696	2.60
Elizabeth, N. J	88,830	298	5	3.355	1.68
Elmira, N. Y	38,272	41	2	1.071	4.88
El Paso, Tex	69,149	48	4	.694	8.33
Elwood, Ind	[1] 11,028	2	.....	.181	.....
Elyria, Ohio	19,503	19	4	.974	21.05
Enfield, Conn	11,924	11	.....	.923	.....
Englewood, N. J	12,603	6	.....	.476	.....
Erie, Pa	76,592	204	3	2.663	1.47
Escanaba, Mich	15,854	91	6	5.740	6.59
Eugene, Oreg	14,257	4	.....	.281	.....
Eureka, Calif	15,142	108	2	7.132	1.85
Evanston, Ill	29,304	150	8	5.119	5.30
Evansville, Ind	76,981	78	2	1.013	2.56
Everett, Mass	40,160	72	.....	1.793	.....
Everett, Wash	37,205	28	.....	.753	.....
Fairmont, W. Va	16,111	4	.....	.248	.....
Fargo, N. Dak	17,872	25	.....	1.399	.....
Farrell, Pa	[1] 10,190	20	1	1.963	5.00
Findlay, Ohio	[1] 14,858	14	.....	.942	.....
Fitchburg, Mass	42,419	58	1	1.367	1.72
Flint, Mich	57,386	621	12	10.821	1.93
Fond du Lac, Wis	21,486	37	.....	1.722	.....
Fort Collins, Colo	11,973	20	.....	1.670	.....
Fort Scott, Kans	10,564	3	.....	.284	.....
Fort Wayne, Ind	78,014	68	.....	.872	.....
Fostoria, Ohio	10,959	16	1	1.460	6.25
Framingham, Mass	14,149	36	.....	2.544	.....
Franklin, Pa	11,556	3	.....	.260	.....
Frederick, Md	11,225	4	.....	.356	.....
Freeport, Ill	19,844	9	.....	.454	.....
Fremont, Ohio	11,034	21	.....	1.903	.....
Fresno, Calif	36,314	59	1	1.626	1.69
Fulton, N. Y	12,138	49	.....	4.037	.....
Galesburg, Ill	24,629	8	.....	.325	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SCARLET FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Galveston, Tex	42,650	12	.....	0.281	.....
Gardner, Mass	17,534	44	.....	2.509	.....
Gary, Ind	56,000	191	11	3.411	5.76
Glens Falls, N. Y	17,160	54	.....	3.147	.....
Gloucester City, N. J	11,375	30	.....	2.637	.....
Gloversville, N. Y	22,314	17	.....	.762	.....
Grand Forks, N. Dak	16,342	15	.....	.918	.....
Grand Island, Nebr	13,133	96	.....	7.310	.....
Granite City, Ill	15,890	32	.....	2.014	.....
Great Falls, Mont	[1] 12,948	44	3	3.155	6.82
Green Bay, Wis	20,017	22	2	.766	8.70
Greenfield, Mass	12,251	77	1	6.285	1.30
Greenville, S. C	18,574	8	.....	.431	.....
Greenwich, Conn	19,594	58	.....	2.960	.....
Hackensack, N. J	17,412	7	.....	.402	.....
Hamilton, Ohio	41,338	34	1	.833	2.94
Hammond, Ind	27,016	112	1	4.146	.89
Hancock, Mich	12,578	43	1	3.419	2.33
Hannibal, Mo	22,399	17	1	.759	5.88
Harrisburg, Pa	73,276	123	7	1.679	5.69
Harrison, N. J	17,345	22	.....	1.268	.....
Haverhill, Mass	49,180	75	2	1.525	2.67
Hazelton, Pa	28,981	18	.....	.621	.....
Helena, Ark	11,122	12	.....	1.079	.....
Hibbing, Minn	17,550	114	.....	6.496	.....
Highland Park, Mich	33,859	239	1	7.060	.42
Hoboken, N. J	78,324	243	2	3.102	.82
Holyoke, Mass	66,503	115	.....	1.729	.....
Homestead, Pa	23,071	20	.....	.867	.....
Hornell, N. Y	14,857	21	1	1.413	4.76
Hot Springs, Ark	17,690	24	.....	1.357	.....
Hudson, N. Y	12,898	1	.....	.078	.....
Huntington, Ind	10,982	24	.....	2.185	.....
Hutchinson, Kans	21,461	47	2	2.190	4.26
Independence, Kans	16,111	24	.....	1.568	.....
Independence, Mo	11,964	103	.....	8.609	.....
Iowa City, Iowa	11,626	9	.....	.774	.....
Ironwood, Mich	15,095	220	6	15.171	2.63
Irvington, N. J	16,710	63	.....	3.770	.....
Ishpeming, Mich	[1] 12,448	152	2	12.212	1.32
Ithaca, N. Y	16,017	12	.....	.749	.....
Jackson, Mich	35,996	227	6	6.306	2.64
Jacksonville, Fla	79,065	21	.....	.266	.....
Jacksonville, Ill	15,506	9	.....	.580	.....
Jamestown, N. Y	37,431	74	2	1.977	2.70
Janesville, Wis	14,411	107	1	7.425	.93
Jeffersonville, Ind	[1] 10,412	3	.....	.288	.....
Johnstown, N. Y	10,678	3	.....	.281	.....
Joliet, Ill	38,549	37	.....	.960	.....
Joplin, Mo	33,400	4	.....	.120	.....
Kalamazoo, Mich	50,408	118	2	2.341	1.69
Kankakee, Ill	14,270	39	2	2.733	5.13
Kearny, N. J	24,325	73	.....	3.001	.....
Kenosha, Wis	32,833	167	3	5.086	1.80
Kewanee, Ill	13,607	8	.....	.588	.....
Kingston, N. Y	26,910	11	.....	.409	.....
Kokomo, Ind	21,929	32	.....	1.459	.....
Lackawanna, N. Y	16,219	18	.....	1.110	.....
La Crosse, Wis	31,834	80	1	2.513	1.25
La Fayette, Ind	21,481	76	4	3.538	5.26
Lakewood, Ohio	23,813	29	2	1.638	6.13
Lancaster, Pa	51,437	34	.....	.661	.....
Lansford, Pa	10,825	7	1	.647	14.29
Lansing, Mich	44,499	183	6	4.112	3.28
Laporte, Ind	13,572	27	.....	1.989	.....
La Salle, Ill	12,332	4	.....	.324	.....
Laurium, Mich	10,649	1	1	.094	100.00
Leavenworth, Kans	[1] 19,363	34	1	1.756	2.94
Lebanon, Pa	20,947	27	3	1.289	11.11
Leominster, Mass	21,365	20	.....	.936	.....
Lewiston, Me	28,061	12	1	.428	8.33
Lewistown, Pa	11,126	2	.....	.180	.....
Lexington, Ky	41,997	32	1	.762	3.13

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SCARLET FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Lima, Ohio	37,145	97	8	2.611	8.25
Lincoln, Ill.	11,991	31	1	2.585	3.23
Lincoln, Nebr.	46,957	471	2	10.030	.42
Little Falls, N. Y.	13,653	6	.....	.439	.....
Logansport, Ind.	21,338	21	.....	9.84	.....
Long Beach, Calif.	29,163	33	.....	1.132	.....
Long Branch, N. J.	15,733	14	.....	.890	.....
Lorain, Ohio	38,266	142	.....	3.711	.....
Ludington, Mich.	10,566	2	.....	.189	.....
Lynchburg, Va.	33,497	10	.....	.299	.....
McAlester, Okla.	19,398	25	.....	1.289	.....
McKeesport, Pa.	48,299	41	1	.849	2.44
McKees Rocks, Pa.	20,795	9	.....	.433	.....
Macon, Ga.	46,099	17	1	.369	5.88
Madison, Wis.	31,315	277	3	8.846	1.08
Mahanoy City, Pa.	17,709	5	.....	.282	.....
Malden, Mass.	52,243	85	4	1.627	4.71
Manchester, Conn.	15,859	11	.....	.694	.....
Manchester, N. H.	79,607	72	2	.904	2.78
Manistee, Mich.	[1] 12,381	84	1	6.785	1.19
Manitowoc, Wis.	13,931	13	.....	.933	.....
Mankato, Minn.	[1] 10,365	14	.....	1.351	.....
Mansfield, Ohio	23,051	5	.....	.217	.....
Marinette, Wis.	[1] 14,610	12	.....	.821	.....
Marion, Ind.	19,923	31	1	1.556	3.23
Marlboro, Mass.	15,285	14	.....	.916	.....
Marquette, Mich.	12,555	62	.....	4.938	.....
Marshall, Tex.	14,076	11	.....	.781	.....
Martinsburg, W. Va.	12,984	8	.....	.616	.....
Mason City, Iowa.	14,938	5	.....	.335	.....
Massillon, Ohio.	15,509	7	.....	.451	.....
Maywood, Ill.	10,903	58	.....	5.320	.....
Medford, Mass.	20,681	55	.....	2.661	.....
Melrose, Mass.	17,724	42	.....	2.370	.....
Menominee, Mich.	[1] 10,507	2	.....	.190	.....
Meriden, Conn.	29,431	32	1	1.087	3.13
Methuen, Mass.	14,320	15	.....	1.047	.....
Michigan City, Ind.	21,913	47	1	2.145	2.13
Middletown, N. Y.	15,690	10	.....	.629	.....
Middletown, Ohio.	16,384	27	.....	1.648	.....
Milford, Mass.	14,230	41	.....	2.781	.....
Millville, N. J.	13,813	5	.....	.362	.....
Mishawaka, Ind.	17,083	66	1	3.805	1.54
Missoula, Mont.	19,075	26	3	1.363	11.54
Mobile, Ala.	59,201	45	.....	.760	.....
Moline, Ill.	27,976	68	1	2.431	1.47
Monessen, Pa.	23,070	5	.....	.217	.....
Monroe, La.	13,698	6	.....	.438	.....
Montclair, N. J.	27,087	28	.....	1.034	.....
Montgomery, Ala.	44,039	69	.....	1.567	.....
Morgantown, W. Va.	14,444	13	.....	.900	.....
Morristown, N. J.	13,410	19	.....	1.417	.....
Moundsville, W. Va.	11,513	28	.....	2.432	.....
Mount Vernon, N. Y.	37,991	86	.....	2.264	.....
Mount Vernon, Ohio.	10,877	4	.....	.368	.....
Muncie, Ind.	25,653	24	1	.936	4.17
Muscatine, Iowa.	17,713	22	.....	1.242	.....
Muskegon, Mich.	27,434	19	.....	.693	.....
Nanticoke, Pa.	23,811	23	.....	.966	.....
Nashua, N. H.	27,541	14	.....	.508	.....
Natick, Mass.	10,140	28	.....	2.761	.....
New Britain, Conn.	55,385	60	.....	1.083	.....
New Brunswick, N. J.	25,855	48	.....	1.857	.....
Newburgh, N. Y.	29,893	20	.....	.669	.....
Newburyport, Mass.	15,291	19	.....	1.243	.....
New Castle, Ind.	14,144	6	.....	.424	.....
New Castle, Pa.	41,915	44	.....	1.050	.....
New London, Conn.	21,199	17	.....	.802	.....
Newport, Ky.	32,133	20	1	.622	5.00
Newport News, Va.	22,622	4	.....	.177	.....
Newport, R. I.	30,585	35	.....	1.144	.....
New Rochelle, N. Y.	39,192	29	.....	.740	.....
Newton, Mass.	44,345	40	.....	.902	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SCARLET FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Niagara Falls, N. Y.	28,486	44		1.544	
Norristown, Pa.	31,180	11	1	.944	9.09
North Adams, Mass.	[1]23,689	37		1.680	
Northampton, Mass.	20,035	96		4.789	
North Attleboro, Mass.	11,244	23	1	2.045	4.35
North Braddock, Pa.	15,681	13		.829	
North Tonowanda, N. Y.	14,089	15		1.331	
North Yakima, Wash.	22,068	6		.272	
Norwalk, Conn.	27,332	26	1	.951	3.85
Norwich, Conn.	28,283	26		1.186	
Norwood, Ohio.	25,289	18		.774	
Oak Park, Ill.	37,826	214	2	5.896	1.22
Ogden, Utah.	32,343	222		6.215	
Oil City, Pa.	29,502	27	1	1.339	3.70
Oklahoma City, Okla.	87,132	48	1	.881	1.18
Olean, N. Y.	16,067	38		2.315	
Orange, N. J.	33,068	79	3	2.949	3.80
Oshkosh, Wis.	36,580	57	1	1.660	1.75
Ossining, N. Y.	14,282	27		1.930	
Oswego, N. Y.	24,229	22		.967	
Ottumwa, Iowa.	24,788	15		.697	
Owensboro, Ky.	15,000	18		.553	
Owosso, Mich.	10,238	66		6.295	
Paducah, Ky.	26,173	17		.675	
Parkersburg, W. Va.	21,000	35		1.662	
Pasadena, Calif.	40,000	11		.222	
Passaic, N. J.	74,472	32		.430	
Pawtucket, R. I.	69,000	66	2	.758	4.35
Peabody, Mass.	15,726	11		.586	
Peekskill, N. Y.	19,000	9		.473	
Pekin, Ill.	16,000	2		.182	
Peoria, Ill.	72,134	178	6	2.355	3.52
Perth Amboy, N. J.	43,000	29		.680	
Peru, Ind.	12,000	35	1	2.802	2.86
Petersburg, Va.	25,471	10		.387	
Phillipsburg, N. J.	15,000	9		.567	
Phoenixville, Pa.	11,000	68	2	5.728	2.94
Pine Bluff, Ark.	17,000	10		.563	
Piqua, Ohio.	14,225	52	1	3.643	1.92
Pittsfield, Mass.	39,000	100	2	2.520	2.00
Pittston, Pa.	15,000	27		1.421	
Plainfield, N. J.	24,000	36		1.480	
Plattsburg, N. Y.	13,111	27		2.822	
Plymouth, Mass.	14,000	13	1	.929	7.69
Plymouth, Pa.	19,000	11	1	.586	9.09
Pomona, Calif.	12,000	5		.367	
Pontiac, Mich.	14,000	307	4	17.050	1.30
Port Chester, N. Y.	16,727	11		.658	
Port Huron, Mich.	[1]25,000	125	4	6.150	3.45
Portland, Me.	64,000	60	1	.618	2.50
Portsmouth, N. H.	11,000	76	1	6.479	1.32
Portsmouth, Ohio.	30,000	44		1.499	
Portsmouth, Va.	46,000	192	2	4.104	1.30
Pottsville, Pa.	23,717	25		1.100	
Poughkeepsie, N. Y.	30,000	31		1.007	
Provo, Utah.	13,000	8		.732	
Pueblo, Colo.	56,000	30		.585	
Punxsutawney (Greater), Pa.	10,000	4		.372	
Quincy, Ill.	36,000	22		.597	
Quincy, Mass.	39,000	47		1.204	
Racine, Wis.	47,000	60		1.264	
Rahway, N. J.	10,000	3		.290	
Raleigh, N. C.	20,000	16		.799	
Redlands, Calif.	14,000	9		.618	
Reno, Nev.	15,000	34	1	2.330	2.78
Richmond, Ind.	26,000	53	1	2.073	1.92
Roanoke, Va.	43,000	13		.281	
Rockford, Ill.	65,000	120	8	2.238	6.30
Rock Island, Ill.	30,000	35		1.154	
Rocky Mount, N. C.	15,000	2		.158	
Rome, Ga.	15,000	28		1.794	
Rome, N. Y.	28,000	24		.866	
Rutland, Vt.	15,000	130	2	13.433	1.59
Sacramento, Calif.	65,000	133	3	1.957	2.22

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SCARLET FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Saginaw, Mich	56,469	358	2	6.340	0.56
St. Cloud, Minn	12,013	28	.....	2.331	.....
St. Joseph, Mo	86,498	128	1	1.480	.78
Salem, Mass	49,346	21	.....	.426	.....
Salem, Oreg	21,274	75	.....	3.525	.....
San Bernardino, Calif	17,616	10	1	.568	10.00
San Diego, Calif	56,412	62	2	1.099	3.23
Sandusky, Ohio	20,236	25	.....	1.236	.....
Sanford, Me	11,217	2	.....	.178	.....
San Jose, Calif	39,810	48	1	1.206	2.08
Santa Ana, Calif	10,981	7	.....	.637	.....
Santa Barbara, Calif	15,360	12	.....	.781	.....
Saratoga Springs, N. Y	13,839	15	.....	1.084	.....
Sault Ste. Marie, Mich	14,130	15	.....	1.062	.....
Sedalia, Mo	19,711	63	.....	3.196	.....
Selma, Ala	15,945	6	.....	.376	.....
Sharon, Pa	19,156	33	.....	1.723	.....
Shawnee, Okla	19,051	12	1	.630	8.33
Sheboygan, Wis	28,907	126	16	4.359	12.70
Shelbyville, Ind	11,201	23	2	2.053	8.70
Shreveport, La	37,064	22	.....	.594	.....
Sioux City, Iowa	58,568	220	2	3.756	.91
Sioux Falls, S. Dak	16,887	41	.....	2.428	.....
Somerville, Mass	88,618	209	3	2.358	1.44
South Bend, Ind	70,967	444	11	6.256	2.48
South Bethlehem, Pa	24,886	14	.....	.563	.....
Southbridge, Mass	14,465	1	.....	.069	.....
Spartanburg, S. C	21,985	23	.....	1.046	.....
Springfield, Ill	62,623	44	.....	.703	.....
Springfield, Ohio	52,296	87	.....	1.664	.....
Stamford, Conn	31,810	40	2	1.257	5.00
Staunton, Va	11,823	12	.....	1.015	.....
Steelton, Pa	15,759	28	.....	1.777	.....
Steubenville, Ohio	28,259	27	1	.955	3.70
Stillwater, Minn	[1] 10,198	12	.....	1.177	.....
Streator, Ill	14,313	15	.....	1.048	.....
Superior, Wis	47,167	33	.....	.700	.....
Tamaqua, Pa	11,062	21	.....	1.898	.....
Tampa, Fla	56,251	48	1	.853	2.08
Taunton, Mass	36,610	56	.....	1.530	.....
Taylor, Pa	12,563	2	.....	.159	.....
Terre Haute, Ind	67,361	40	1	.594	2.50
Texarkana, Tex	13,099	17	.....	1.298	.....
Tiffin, Ohio	12,962	13	.....	1.003	.....
Topeka, Kans	49,538	123	3	2.483	2.44
Trinidad, Colo	14,413	11	.....	.763	.....
Troy, N. Y	78,094	181	1	2.318	.55
Tucson, Ariz	17,324	4	.....	.231	.....
Tuscaloosa, Ala	10,824	2	.....	.185	.....
Utica, N. Y	89,272	85	1	.952	1.18
Vallejo, Calif	13,803	6	.....	.435	.....
Vancouver, Wash	13,805	48	.....	3.477	.....
Virginia, Minn	15,954	103	3	6.456	2.91
Waco, Tex	34,015	21	.....	.617	.....
Walla Walla, Wash	26,057	16	.....	.614	.....
Waltham, Mass	31,011	35	.....	1.129	.....
Warren, Ohio	13,308	21	.....	1.578	.....
Warren, Pa	15,083	9	.....	.597	.....
Washington, Pa	22,076	52	.....	2.355	.....
Waterbury, Conn	89,201	83	.....	.930	.....
Waterloo, Iowa	36,987	62	1	1.676	1.61
Watertown, Mass	15,188	23	.....	1.514	.....
Watertown, N. Y	30,404	14	.....	.460	.....
Waukegan, Ill	20,917	20	2	.956	10.00
Wausau, Wis	19,606	128	7	6.509	5.47
Webster, Mass	13,484	9	.....	.667	.....
West Chester, Pa	13,403	4	.....	.298	.....
Westfield, Mass	18,769	127	2	0.766	1.57
West Hoboken, N. J	44,398	94	.....	2.118	.....
West New York, N. J	19,613	74	.....	3.773	.....
West Orange, N. J	13,904	43	1	3.079	2.33
Wheeling, W. Va	43,657	34	.....	.779	.....
White Plains, N. Y	23,331	23	.....	.986	.....
Wichita Falls, Tex	12,749	6	1	.471	16.67

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SCARLET FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Wichita, Kans.	73,887	139	.....	1.730	.....
Wilkes Barre, Pa.	78,334	98	.....	1.136	.....
Wilkinsburg, Pa.	28,889	53	.....	2.226	.....
Wilmington, Del.	95,369	106	3	1.111	2.83
Wilmington, N. C.	30,409	11	.....	.362	.....
Winchester, Mass.	10,812	2	.....	.185	.....
Winona, Minn.	[1] 18,583	10	1	.538	10.00
Winston-Salem, N. C.	33,126	146	3	4.408	2.05
Winthrop, Mass.	13,105	76	.....	5.798	.....
Woburn, Mass.	14,076	28	.....	2.988	.....
Zanesville, Ohio.	21,220	47	1	1.501	2.13

SMALLPOX.[2]

Aberdeen, S. Dak.	15,936	22	.....	1.381	.....
Akron, Ohio.	69,604	388	1	3.181	0.26
Alameda, Calif.	28,433	3	.....	.106	.....
Albuquerque, N. Mex.	14,509	1	.....	.069	.....
Alexandria, La.	16,222	35	.....	2.156	.....
Alpena, Mich.	13,365	100	.....	7.481	.....
Alton, Ill.	25,743	70	.....	2.718	.....
Altoona, Pa.	30,712	6	.....	.195	.....
Amarillo, Tex.	20,582	20	.....	.972	.....
Anderson, Ind.	34,220	85	.....	3.183	.....
Ann Arbor, Mich.	15,941	35	.....	2.197	.....
Anniston, Ala.	14,326	41	.....	2.862	.....
Asheville, N. C.	25,656	3	.....	.117	.....
Ashland, Ky.	12,195	1	.....	.082	.....
Ashtabula, Ohio.	22,008	1	.....	.045	.....
Astoria, Oreg.	10,487	56	.....	5.340	.....
Atchison, Kans.	16,735	28	.....	1.673	.....
Augusta, Me.	14,325	0	.....	.000	.....
Austin, Tex.	35,612	162	36	4.549	22.22
Bangor, Me.	26,956	27	.....	1.001	.....
Barberton, Ohio.	14,187	53	.....	3.735	.....
Battle Creek, Mich.	36,159	22	.....	.608	.....
Bay City, Mich.	48,390	24	.....	.496	.....
Beacon, N. Y.	11,674	8	.....	.685	.....
Beatrice, Nebr.	10,427	0	.....	.000	.....
Beaumont, Tex.	28,651	13	.....	.454	.....
Bedford, Ind.	10,643	33	.....	3.100	.....
Bellingham, Wash.	34,362	9	.....	.262	.....
Beloit, Wis.	18,547	71	.....	3.829	.....
Benton Harbor, Mich.	11,089	9	.....	.811	.....
Berlin, N. H.	13,462	1	.....	.074	.....
Beverly, Mass.	22,128	2	.....	.090	.....
Billings, Mont.	15,123	14	.....	.926	.....
Bloomington, Ind.	11,661	43	.....	3.686	.....
Boise, Idaho.	35,951	13	.....	.362	.....
Braddock, Pa.	22,080	4	.....	.181	.....
Bradford, Pa.	[1] 14,544	1	.....	.069	.....
Brazil, Ind.	10,472	26	.....	2.482	.....
Bristol, Conn.	16,318	6	.....	.368	.....
Brookline, Mass.	33,526	1	.....	.030	.....
Brunswick, Ga.	10,984	1	.....	.091	.....
Burlington, Iowa.	25,144	17	.....	.676	.....
Butler, Pa.	20,677	1	.....	.048	.....
Cairo, Ill.	15,985	35	.....	2.189	.....
Cambridge, Ohio.	13,804	4	.....	.290	.....
Canton, Ill.	13,674	3	.....	.219	.....
Canton, Ohio.	62,585	15	.....	.240	.....
Cape Girardeau, Mo.	11,146	8	1	.718	12.50
Carnegie, Pa.	11,983	1	.....	.084	.....
Cedar Rapids, Iowa.	36,033	11	.....	.305	.....
Centralia, Ill.	11,538	30	.....	2.600	.....
Charleston, W. Va.	31,089	37	.....	1.191	.....
Cheyenne, Wyo.	[1] 11,320	17	.....	1.502	.....
Chicago Heights, Ill.	22,982	20	.....	.870	.....
Chillicothe, Ohio.	15,686	13	.....	.829	.....
Cicero, Ill.	30,848	9	.....	.292	.....
Cleburne, Tex.	12,382	4	.....	.323	.....

[1] Population Apr. 15, 1910.
[2] Cities in which no cases of this disease were reported are not included in this table.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SMALLPOX—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Clinton, Iowa	27,678	101	.....	3.649	.....
Coffeyville, Kans	13,331	14	.....	.764	.....
Cohoes, N. Y	25,292	11	.....	.435	.....
Colorado Springs, Colo	38,965	6	.....	.154	.....
Columbus, Ga	26,306	6	.....	.228	.....
Concord, N. H	22,858	1	.....	.044	.....
Corpus Christi, Tex	10,789	1	.....	.093	.....
Corsicana, Tex	10,066	8	.....	.795	.....
Coshocton, Ohio	11,887	13	.....	1.094	.....
Council Bluffs, Iowa	31,838	145	.....	4.554	.....
Covington, Ky	59,623	33	.....	.553	.....
Crawfordsville, Ind	11,443	1	.....	.087	.....
Cumberland, Md	26,686	24	.....	.899	.....
Danville, Ill	32,969	168	.....	5.096	.....
Davenport, Iowa	49,618	67	1	1.350	1.49
Decatur, Ill	41,483	81	.....	1.953	.....
Dover, N. H	13,276	3	.....	.226	.....
Dubuque, Iowa	40,096	28	.....	.698	.....
Duluth, Minn	97,077	81	15	.834	18.52
Durham, N. C	26,160	1	.....	.038	.....
East Chicago, Ind	30,286	37	.....	1.222	.....
East Cleveland, Ohio	13,864	11	.....	.793	.....
East St. Louis, Ill	77,312	537	.....	6.946	.....
Eau Claire, Wis	18,887	25	.....	1.324	.....
Elgin, Ill	28,562	5	.....	.175	.....
El Paso, Tex	69,149	19	5	.275	26.32
Elwood, Ind	[1] 11,028	50	.....	4.534	.....
Elyria, Ohio	19,508	10	.....	.513	.....
Erie, Pa	76,592	31	.....	.405	.....
Evanston, Ill	29,384	1	.....	.034	.....
Evansville, Ind	76,981	158	.....	2.052	.....
Everett, Wash	37,205	8	.....	.215	.....
Fairmont, W. Va	16,111	1	.....	.062	.....
Fargo, N. Dak	17,872	8	.....	.448	.....
Farrell, Pa	[1] 10,190	3	.....	.294	.....
Findlay, Ohio	[1] 14,858	19	.....	1.279	.....
Fitchburg, Mass	42,419	4	1	.094	25.00
Flint, Mich	57,386	214	1	3.729	.47
Fond du Lac, Wis	21,486	6	.....	.279	.....
Fort Collins, Colo	11,973	4	.....	.334	.....
Fort Scott, Kans	10,564	3	.....	.284	.....
Fort Wayne, Ind	78,014	460	.....	5.896	.....
Fostoria, Ohio	10,959	7	.....	.639	.....
Freeport, Ill	19,844	2	.....	.101	.....
Fremont, Ohio	11,034	3	.....	.272	.....
Fresno, Calif	36,314	1	.....	.028	.....
Galesburg, Ill	24,629	13	.....	.528	.....
Galveston, Tex	42,650	24	.....	.563	.....
Gary, Ind	56,000	60	.....	1.071	.....
Grand Forks, N. Dak	16,342	6	.....	.367	.....
Grand Island, Nebr	13,133	79	.....	6.015	.....
Granite City, Ill	15,890	55	.....	3.461	.....
Great Falls, Mont	[1] 13,948	36	.....	2.581	.....
Green Bay, Wis	30,017	3	.....	.100	.....
Greenville, S. C	18,574	4	.....	.215	.....
Greenville, Tex	10,301	10	.....	.971	.....
Greenwich, Conn	19,594	1	.....	.051	.....
Hamilton, Ohio	41,338	24	.....	.581	.....
Hammond, Ind	27,016	7	.....	.259	.....
Hannibal, Mo	29,399	14	.....	.625	.....
Harrisburg, Pa	73,276	14	.....	.191	.....
Helena, Ark	11,122	24	1	2.158	4.17
Hibbing, Minn	17,550	8	.....	.456	.....
Highland Park, Mich	33,859	55	.....	1.624	.....
Homestead, Pa	23,071	1	.....	.043	.....
Hot Springs, Ark	17,690	42	.....	2.374	.....
Huntington, Ind	10,982	3	.....	.273	.....
Hutchinson, Kans	21,461	3	.....	.140	.....
Independence, Kans	15,111	11	.....	.728	.....
Independence, Mo	11,964	113	.....	9.445	.....
Iowa City, Iowa	11,626	8	.....	.688	.....
Ishpeming, Mich	[1] 12,448	3	.....	.241	.....
Jackson, Mich	35,996	22	.....	.611	.....
Jacksonville, Fla	79,065	27	.....	.341	.....
Jacksonville, Ill	15,506	24	.....	1.548	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SMALLPOX—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Jamestown, N. Y.		1			
Janesville, Wis.		15			
Jeffersonville, Ind.		1			
Joliet, Ill.		1			
Kankakee, Ill.		2			
Kenosha, Wis.		5			
Kewanee, Ill.		1			
Kokomo, Ind.		5			
La Crosse, Wis.		111			
La Fayette, Ind.		61			
Lakewood, Ohio.		3			
Lansing, Mich.		18			
Laporte, Ind.		17			
La Salle, Ill.		1			
Leavenworth, Kans.		11			
Lewiston, Me.		1			
Lexington, Ky.		6			
Lima, Ohio.		13	1		7.69
Lincoln, Ill.		65	1		1.54
Lincoln, Nebr.		6			
Logansport, Ind.		4			
Lorain, Ohio.		4			
Ludington, Mich.		13	1		7.69
McAlester, Okla.		16			
McKeesport, Pa.		12			
Macon, Ga.		13			
Madison, Wis.		44			
Malden, Mass.		1			
Manitowoc, Wis.		6			
Mankato, Minn.		15			
Mansfield, Ohio.		1			
Marinette, Wis.		20			
Marion, Ind.		19	1		5.26
Marquette, Mich.		7			
Marshall, Tex.		15			
Mason City, Iowa.		16			
Massillon, Ohio.		1			
Menominee, Mich.		5			
Michigan City, Ind.		11			
Middletown, Ohio.		28	15		53.57
Mishawaka, Ind.		1			
Mobile, Ala.		6			
Moline, Ill.		28			
Monroe, La.		24			
Montgomery, Ala.		21			
Morgantown, W. Va.		2			
Mount Vernon, Ohio.		1			
Muncie, Ind.		15			
Muscatine, Iowa.		15			
Muskegon, Mich.		11			
New Britain, Conn.		9			
New Castle, Ind.		2			
New Castle, Pa.		9			
New London, Conn.		1			
Newport, Ky.		4			
Newport News, Va.		2			
Niagara Falls, N. Y.		14			
North Yakima, Wash.		15			
Norwalk, Conn.		3			
Oak Park, Ill.		1			
Ogden, Utah.		12			
Oklahoma City, Okla.		22	1		4.55
Oshkosh, Wis.		3			
Ottumwa, Iowa.		21			
Owensboro, Ky.		1			
Owosso, Mich.		15			
Paducah, Ky.		16			
Parkersburg, W. Va.		2			
Peekskill, N. Y.		1			
Pekin, Ill.		8			
Peoria, Ill.		156			
Peru, Ind.		1			
Petersburg, Va.		3			
Pine Bluff, Ark.		24			

[1] Population Apr. 15, 1918.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SMALLPOX—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Piqua, Ohio	14,275	62	.....	4.343	.....
Pomona, Calif.	13,624	7	.....	.514	.....
Pontiac, Mich.	18,006	133	.....	7.386	.....
Port Huron, Mich.	[1] 18,863	69	.....	3.658	.....
Portland, Me.	64,720	1	.....	.015	.....
Portsmouth, Ohio	29,356	64	.....	2.180	.....
Portsmouth, Va.	40,693	9	.....	.221	.....
Provo, Utah	10,923	6	.....	.549	.....
Pueblo, Colo.	56,084	2	.....	.036	.....
Quincy, Ill.	36,832	58	.....	1.575	.....
Racine, Wis.	47,465	9	.....	.190	.....
Raleigh, N. C.	20,274	24	.....	1.184	.....
Redlands, Calif.	14,573	15	.....	1.029	.....
Reno, Nev.	15,514	2	.....	.129	.....
Richmond, Ind.	25,080	140	.....	5.582	.....
Roanoke, Va.	46,282	17	.....	.367	.....
Rockford, Ill.	56,739	36	1	.634	2.78
Rock Island, Ill.	29,452	30	.....	1.019	.....
Rocky Mount, N. C.	12,673	19	.....	1.499	.....
Rome, Ga.	15,607	2	.....	.128	.....
Rome, N. Y.	24,259	3	.....	.124	.....
Rutland, Vt.	15,038	1	.....	.066	.....
Sacramento, Calif.	68,984	1	.....	.014	.....
Saginaw, Mich.	56,469	9	.....	.159	.....
Saint Cloud, Minn.	12,013	18	.....	1.498	.....
Saint Joseph, Mo.	86,498	305	1	3.526	.33
San Bernardino, Calif.	17,616	3	.....	.170	.....
San Diego, Calif.	56,412	2	.....	.035	.....
Sandusky, Ohio	20,226	2	.....	.099	.....
Sault Ste. Marie, Mich.	14,130	9	.....	.637	.....
Sedalia, Mo.	19,711	272	.....	13.799	.....
Selma, Ala.	15,945	5	.....	.314	.....
Sharon, Pa.	19,156	5	.....	.261	.....
Shawnee, Okla.	19,051	7	.....	.367	.....
Shelbyville, Ind.	11,201	33	.....	2.946	.....
Shreveport, La.	37,064	16	.....	.432	.....
Sioux City, Iowa	58,568	384	.....	6.556	.....
Sioux Falls, S. Dak.	16,837	111	.....	6.573	.....
South Bend, Ind.	70,967	1	.....	.014	.....
South Bethlehem, Pa.	24,886	1	.....	.040	.....
Spartanburg, S. C.	21,985	2	.....	.091	.....
Springfield, Ill.	62,623	45	.....	.719	.....
Springfield, Ohio	52,296	124	.....	2.371	.....
Stamford, Conn.	31,810	3	.....	.094	.....
Staunton, Va.	11,823	1	.....	.085	.....
Steelton, Pa.	15,759	5	.....	.317	.....
Steubenville, Ohio	28,259	6	.....	.212	.....
Superior, Wis.	47,167	14	.....	.297	.....
Tampa, Fla.	56,251	1	.....	.018	.....
Terre Haute, Ind.	67,361	427	.....	6.339	.....
Texarkana, Tex.	13,099	10	.....	.763	.....
Topeka, Kans.	49,538	82	.....	1.655	.....
Trinidad, Colo.	14,413	1	.....	.069	.....
Tucson, Ariz.	17,324	2	.....	.115	.....
Tuscaloosa, Ala.	10,824	1	.....	.092	.....
Utica, N. Y.	89,272	25	.....	.280	.....
Virginia, Minn.	15,954	1	.....	.063	.....
Waco, Tex.	34,015	74	13	2.176	17.67
Warren, Ohio	13,308	37	.....	2.780	.....
Warren, Pa.	15,083	2	.....	.133	.....
Washington, Pa.	22,076	2	.....	.091	.....
Waterbury, Conn.	89,201	269	.....	3.016	.....
Waterloo, Iowa	36,987	20	.....	.541	.....
Waukegan, Ill.	20,917	18	.....	.861	.....
Wausau, Wis.	19,666	6	.....	.305	.....
Webster, Mass.	13,484	3	.....	.222	.....
Wheeling, W. Va.	43,657	10	.....	.229	.....
Wichita Falls, Tex.	12,749	30	.....	2.353	.....
Wichita, Kans.	73,597	83	.....	1,128	.....
Wilkinsburg, Pa.	23,899	1	.....	.042	.....
Wilmington, N. C.	30,400	7	.....	.230	.....
Winona, Minn.	[1] 18,583	15	.....	.807	.....
Zanesville, Ohio	31,320	46	.....	1.469	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (PULMONARY) [1].

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Number of cases reported for each death registered.
Adams, Mass	14,406	25	8	1.735	3.13
Adrian, Mich	11,570	1	6	.....	.....
Akron, Ohio	93,604	227	103	2.425	2.20
Alameda, Calif	28,433	27	21	.960	1.29
Alpena, Mich	13,365	2	9	.....	.....
Alton, Ill	23,783	7	.....	.294	.....
Amesbury, Mass	10,200	13	16	.....	.....
Anderson, Ind	24,230	51	15	2.105	3.40
Ann Arbor, Mich	15,041	71	7	4.720	10.14
Anniston, Ala	14,326	9	38	.....	.....
Appleton, Wis	18,005	13	13	.722	1.00
Arlington, Mass	13,073	24	15	1.836	1.60
Asbury Park, N. J	14,029	19	7	1.299	2.71
Astoria, Oreg	10,487	25	25	2.384	1.09
Atchison, Kans	16,785	18	.....	1.072	.....
Atlantic City, N. J	59,515	175	28	2.940	6.25
Attleboro, Mass	19,776	30	18	1.517	1.67
Auburn, N. Y	37,823	30	33	.....	.....
Augusta, Me	14,325	24	22	1.675	1.09
Aurora, Ill	34,795	3	29	.....	.....
Bakersfield, Calif	17,543	6	42	.....	.....
Barberton, Ohio	14,187	22	22	1.551	1.00
Batavia, N. Y	13,595	21	9	1.545	2.33
Battle Creek, Mich	30,159	39	15	1.293	2.60
Bay City, Mich	48,390	61	34	1.261	1.79
Beacon, N. Y	11,674	39	14	3.341	2.79
Beatrice, Nebr	10,437	2	2	.192	1.00
Beaumont, Tex	28,851	39	39	1.352	1.00
Beaver Falls, Pa	13,749	3	.....	.218	.....
Bellaire, Ohio	14,575	14	14	.961	1.00
Beloit, Wis	18,547	6	11	.....	.....
Benton Harbor, Mich	11,099	11	11	.991	1.00
Berkeley, Calif	60,427	51	22	.844	2.32
Bessemer, Ala	17,156	15	46	.....	.....
Bethlehem, Pa	14,363	8	12	.....	.....
Beverly, Mass	22,128	35	16	1.582	2.19
Billings, Mont	15,123	18	18	1.190	1.00
Bayonne, N. J	19,013	10	19	.....	.....
Bloomington, Ind	11,661	17	16	1.458	1.06
Bradford, Pa	22,080	30	.....	1.360	.....
Brainerd	10,472	7	3	.668	2.33
Bridgeton, N. J	14,425	18	11	1.248	1.64
Bristol, Conn	16,318	35	14	2.145	2.50
Brockton, Mass	69,152	118	38	1.706	3.11
Brookline, Mass	33,526	38	12	1.133	3.17
Brunswick, Ga	10,984	34	20	3.095	1.70
Bucyrus, Ohio	28,077	26	.....	.907	.....
Butler, Pa	13,804	14	13	1.014	1.08
Butte, Mont	62,566	53	39	.847	1.36
Cabanne, Mo	11,146	12	12	1.077	1.00
Canonsburg, Pa	19,597	10	8	.510	1.25
Canton	10,795	13	.....	1.204	.....
Carlisle	11,963	5	8	.....	.....
Carroll, Iowa	38,023	11	17	.....	.....
Charleston, W. Va	31,060	20	16	.644	1.25
Chelsea	48,405	136	47	2.810	2.89
Chicago	41,857	128	82	3.058	1.56
Cincinnati	29,950	99	58	3.306	1.71
Cleveland, Ohio	15,025	19	18	1.216	1.06
Colorado	20,846	44	.....	2.111	.....
Columbus	[2] 13,075	18	13	1.377	1.38
Connellsville, Pa	14,998	18	3	1.200	6.00
Council Bluffs	25,292	39	37	1.542	1.05
Covington	26,306	38	22	1.445	1.73
Cranford	22,858	11	19	.....	.....
Dallas, Pa	15,876	17	15	1.071	1.13
Danville	10,066	15	.....	1.490	.....
Decatur	13,321	24	6	1.802	4.00
Delphos, Ind	11,443	8	6	.699	1.33
Denver, Md	26,686	81	13	3.036	6.23

[1] Cities in which no cases of this disease were reported are not included in this table.
[2] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

SYPHILIS.[1]

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Alameda, Calif.	28,433	1		0.035	
Alexandria, Va.	17,939	1	1	.056	100.00
Anderson, Ind.	24,230	1		.041	
Ann Arbor, Mich.	15,041	1		.066	
Bakersfield, Calif.	17,543	8	1	.456	12.50
Battle Creek, Mich.	30,159	1	1	.033	100.00
Bay City, Mich.	48,390	3		.062	
Bayonne, N. J.	72,204	1		.014	
Berkeley, Calif.	60,427	12		.199	
Bristol, Conn.	16,318	1		.061	
Brockton, Mass.	69,152	93		1.345	
Burlington, Iowa.	25,144	15		.597	
Cambridge, Ohio.	13,804	1	1	.072	100.00
Canton, Ohio.	62,566	2		.032	
Cedar Rapids, Iowa.	39,033	10		.263	
Chillicothe, Ohio.	15,625	1	1	.064	100.00
Coshocton, Ohio.	11,847	1		.084	
Decatur, Ill.	41,483	25		.603	
Dubuque, Iowa.	40,066	10		.249	
East Chicago, Ind.	30,286	1	1	.033	100.00
Elgin, Ill.	28,502	3		.070	
Elwood, Ind.	[2] 11,028	1		.091	
Eureka, Calif.	13,142	4		.304	
Everett, Mass.	40,100	1		.025	
Findlay, Ohio.	[2] 14,858	1		.067	
Flint, Mich.	57,346	59		1.029	
Fremont, Ohio.	11,034	1		.091	
Fresno, Calif.	36,314	4		.110	
Hamilton, Ohio.	41,338	7	1	.169	14.29
Hannibal, Mo.	22,399	8		.357	
Hudson, N. Y.	12,498	1		.079	
Ithaca, N. Y.	16,017	6	1	.375	16.67
Leavenworth, Kans.	[2] 19,363	6		.310	
Lima, Ohio.	37,145	7		.188	
Manchester, Conn.	15,839	41		2.588	
Marquette, Mich.	12,555	1		.079	
Mason City, Iowa.	14,934	4		.268	
Massillon, Ohio.	15,609	2		.128	
Middletown, Ohio.	16,384	9		.549	
Moline, Ill.	17,970	1	1	.056	100.00
Montclair, N. J.	27,087	21	2	.775	9.52
Morristown, N. J.	13,410	1		.075	
New Britain, Conn.	55,395	2		.036	
Newport, Ky.	32,133	2	2	.062	100.00
Norristown, Pa.	31,969	1		.031	
Norwich, Conn.	21,923	1		.046	
Norwood, Ohio.	23,169	1		.043	
Pasadena, Calif.	49,650	10		.202	
Pine Bluff, Ark.	17,777	4		.225	
Port Chester, N. Y.	16,727	2	2	.120	100.00
Racine, Wis.	47,465	5	5	.105	100.00
Rahway, N. J.	10,351	22		2.126	
Sacramento, Calif.	64,984	7	5	.101	71.43
San Diego, Calif.	50,412	64		1.126	
Sandusky, Ohio.	20,228	2		.099	
San Jose, Calif.	39,810	10	2	.251	20.00
Santa Ana, Calif.	10,981	7		.637	
Santa Barbara, Calif.	15,360	6		.391	
Springfield, Ohio.	52,...6	7	6	.134	85.71
Stockton, Calif.	25,209	2	2	.085	100.00
Topeka, Kans.	49,538	1	1	.020	100.00
Waco, Tex.	34,015	1	2		
Waterloo, Iowa.	36,987	1		.027	
Wichita Falls, Tex.	12,749	20		1.569	

[1] Cities in which no cases of this disease were reported are not included in this table.
[2] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (PULMONARY) [1].

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Number of cases reported for each death registered.
Adams, Mass	14,406	25	8	1.735	3.13
Adrian, Mich	11,570	1	6	.....	.....
Akron, Ohio	93,604	227	103	2.425	2.20
Alameda, Calif	28,433	27	21	.950	1.29
Alpena, Mich	13,365	2	9	.....	.....
Alton, Ill	23,783	7	.....	.294	.....
Amesbury, Mass	10,200	13	16	.....	.....
Anderson, Ind	24,230	51	15	2.105	3.40
Ann Arbor, Mich	15,041	71	7	4.720	10.14
Anniston, Ala	14,326	9	38	.....	.....
Appleton, Wis	18,005	13	13	.722	1.00
Arlington, Mass	13,073	24	15	1.836	1.60
Asbury Park, N. J	14,029	19	7	1.299	2.71
Astoria, Oreg	10,487	25	25	2.384	1.00
Atchison, Kans	16,785	18	.....	1.072	.....
Atlantic City, N. J	59,515	175	28	2.940	6.25
Attleboro, Mass	19,776	30	18	1.517	1.67
Auburn, N. Y	37,823	30	33	.....	.....
Augusta, Me	14,325	24	22	1.675	1.09
Aurora, Ill	34,795	3	29	.....	.....
Bakersfield, Calif	17,543	6	42	.....	.....
Barberton, Ohio	14,187	22	22	1.551	1.00
Batavia, N. Y	13,595	21	9	1.545	2.33
Battle Creek, Mich	30,159	39	15	1.293	2.60
Bay City, Mich	48,390	61	34	1.261	1.79
Beacon, N. Y	11,674	39	14	3.341	2.79
Beatrice, Nebr	10,437	2	2	.192	1.00
Beaumont, Tex	28,851	39	39	1.352	1.00
Beaver Falls, Pa	13,749	3	.....	.218	.....
Bellaire, Ohio	14,575	14	14	.961	1.00
Beloit, Wis	18,547	6	11	.....	.....
Benton Harbor, Mich	11,099	11	11	.991	1.00
Berkeley, Calif	60,427	51	22	.844	2.32
Bessemer, Ala	17,156	15	46	.....	.....
Bethlehem, Pa	14,358	8	12	.....	.....
Beverly, Mass	22,128	35	16	1.582	2.19
Billings, Mont	15,123	18	18	1.190	1.00
Bloomfield, N. J	19,013	10	19	.....	.....
Bloomington, Ind	11,661	17	16	1.458	1.06
Braddock, Pa	22,060	30	.....	1.360	.....
Brazil, Ind	10,472	7	3	.668	2.33
Bridgeton, N. J	14,425	18	11	1.248	1.64
Bristol, Conn	16,318	35	14	2.145	2.50
Brockton, Mass	69,152	118	38	1.706	3.11
Brookline, Mass	33,526	38	12	1.133	3.17
Brunswick, Ga	10,984	34	20	3.095	1.70
Butler, Pa	28,677	26	.....	.907	.....
Cambridge, Ohio	13,804	14	13	1.014	1.08
Canton, Ohio	62,566	53	39	.847	1.36
Cape Girardeau, Mo	11,146	12	12	1.077	1.00
Carondale, Pa	19,597	10	8	.510	1.25
Carlisle, Pa	10,795	13	.....	1.204	.....
Carnegie, Pa	11,963	5	8	.....	.....
Cedar Rapids, Iowa	38,033	11	17	.....	.....
Charleston, W. Va	31,060	20	16	.644	1.25
Chelsea, Mass	48,405	136	47	2.810	2.89
Chester, Pa	41,857	128	82	3.058	1.56
Chicopee, Mass	29,950	99	58	3.306	1.71
Cincinnati, Ohio	15,625	19	18	1.216	1.06
Cicero, Ill	20,846	44	.....	2.111	.....
Clinton, Mass	[2] 13,075	18	12	1.377	1.38
Clairsville, Pa	14,998	18	3	1.200	6.00
Clyde, N. Y	25,292	39	37	1.542	1.05
Columbus, Ga	26,306	38	22	1.445	1.73
Concord, N. H	22,858	11	19	.....	.....
Connellsville, Pa	15,876	17	15	1.071	1.13
Corsicana, Tex	10,066	15	.....	1.490	.....
Cortland, N. Y	13,321	24	6	1.802	4.00
Crawfordsville, Ind	11,443	8	6	.699	1.33
Cumberland, Md	26,686	81	13	3.035	6.23

[1] Cities in which no cases of this disease were reported are not included in this table.
[2] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (PULMONARY)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Number of cases reported for each death registered.
Cumberland, R. I.	10,968	8	9	.....	.....
Danbury, Conn.	22,931	27	40	.....	.....
Decatur, Ill.	41,483	78	36	1.880	2.17
Dedham, Mass.	10,618	6	8	.....	.....
Dover, N. H.	13,276	19	14	1.431	1.36
Du Bois, Pa.	14,994	3	.....	.200	.....
Duluth, Minn.	97,077	220	72	2.266	3.06
Dunkirk, N. Y.	21,311	14	15	.....	.....
East Chicago, Ind.	30,286	40	37	1.321	1.08
East Cleveland, Ohio.	13,864	5	1	.361	5.00
Easthampton, Mass.	10,656	14	7	1.314	2.00
East Orange, N. J.	43,761	62	38	1.417	1.63
Edwardsville, Pa.	10,771	20	6	1.857	3.33
Elizabeth, N. J.	88,830	238	120	2.679	1.98
Elmira, N. Y.	38,272	131	31	3.423	4.22
Elwood, Ind.	[1] 11,028	3	35	.....	.....
Elyria, Ohio.	19,503	14	14	.718	1.00
Enfield, Conn.	11,924	6	16	.....	.....
Englewood, N. J.	12,663	20	9	1.897	2.22
Erie, Pa.	76,592	232	95	3.029	2.44
Escanaba, Mich.	15,854	35	16	2.208	2.19
Eugene, Oreg.	14,257	8	8	.561	1.00
Eureka, Calif.	15,142	7	4	.462	1.75
Evansville, Ind.	76,981	119	113	1.546	1.05
Everett, Mass.	40,160	74	22	1.843	3.36
Fargo, N. Dak.	17,972	26	8	1.446	3.25
Farrell, Pa.	[1] 10,190	2	7	.....	.....
Findlay, Ohio.	[1] 14,858	10	10	.673	1.00
Fitchburg, Mass.	42,419	116	41	2.733	2.83
Flint, Mich.	57,396	154	34	2.684	4.53
Fond du Lac, Wis.	21,486	14	14	.652	1.00
Fort Collins, Colo.	11,973	2	.....	.167	.....
Fort Scott, Kans.	10,564	12	2	1.136	6.00
Fort Wayne, Ind.	78,014	75	67	.961	1.12
Fostoria, Ohio.	10,959	7	13	.....	.....
Framingham, Mass.	14,149	57	15	4.029	3.80
Franklin, Pa.	11,555	9	3	.779	3.00
Freeport, Ill.	19,844	24	16	1.713	2.13
Fremont, Ohio.	11,034	11	11	.997	1.00
Fresno, Calif.	36,314	40	46	.....	.....
Galveston, Tex.	42,650	98	58	.....	.....
Gardner, Mass.	17,534	33	19	1.882	1.74
Gary, Ind.	56,000	15	21	.....	.....
Glens Falls, N. Y.	17,169	48	16	2.797	3.00
Gloucester City, N. J.	11,375	11	13	.....	.....
Gloversville, N. Y.	22,314	44	16	1.972	2.75
Granite City, Ill.	15,890	6	13	.....	.....
Green Bay, Wis.	30,017	19	19	.633	1.00
Greenville, S. C.	18,574	25	32	.....	.....
Greenwich, Conn.	19,594	25	15	1.276	1.67
Hackensack, N. J.	17,412	6	.....	.345	.....
Hamilton, Ohio.	41,338	55	36	1.330	1.53
Hammond, Ind.	27,016	5	17	.....	.....
Hancock, Mich.	12,578	2	6	.....	.....
Harrison, N. J.	17,345	34	.....	1.960	.....
Haverhill, Mass.	49,180	121	56	2.460	2.16
Helena, Ark.	11,122	18	3	1.618	6.00
Hibbing, Minn.	17,550	2	1	.114	2.00
Highland Park, Mich.	33,850	88	8	2.599	11.00
Holyoke, Mass.	66,503	97	60	1.459	1.62
Homestead, Pa.	23,071	43	18	2.863	2.39
Hornell, N. Y.	14,857	11	8	.740	1.38
Hot Springs, Ark.	17,690	6	9	.....	.....
Hudson, N. Y.	12,898	28	12	2.946	2.17
Huntington, Ind.	10,982	8	6	.728	1.33
Independence, Kans.	15,111	7	.....	.463	.....
Ironwood, Mich.	15,085	24	20	1.590	1.20
Ishpeming, Mich.	[1] 12,448	5	6	.....	.....
Ithaca, N. Y.	16,017	49	8	3.060	6.12
Jackson, Mich.	35,998	80	38	2.222	2.11
Jacksonville, Fla.	79,005	355	178	4.490	1.99
Jamestown, N. Y.	37,431	63	43	1.683	1.47

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (PULMONARY)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Number of cases reported for each death registered.
Jeffersonville, Ind.	[1] 10,412	8	8	0.768	1.00
Johnstown, N. Y.	10,678	6	2	.562	3.00
Joplin, Mo.	33,400	18	133	.....	.....
Kankakee, Ill.	14,270	9	26	.....	.....
Kenosha, Wis.	32,833	29	14	.883	2.07
Kewanee, Ill.	13,607	1	.....	.073	.....
Kokomo, Ind.	21,929	30	23	1.368	1.30
La Crosse, Wis.	31,833	32	.....	1.005	.....
La Fayette, Ind.	21,481	24	24	1.117	1.00
Lakewood, Ohio.	23,813	21	14	.882	1.50
Lancaster, Pa.	51,437	42	42	.817	1.00
Laporte, Ind.	13,572	4	11	.....	.....
La Salle, Ill.	12,332	22	15	1.784	1.47
Latrobe, Pa.	11,815	3	7	.....	.....
Laurium, Mich.	10,649	14	4	1.315	3.50
Leavenworth, Kans.	[1] 19,363	27	15	1.394	1.80
Leominster, Mass.	21,365	49	12	2.293	4.08
Lewistown, Pa.	11,126	21	9	1.887	2.33
Lima, Ohio.	37,145	42	35	1.131	1.20
Lincoln, Ill.	11,991	2	56	.....	.....
Little Falls, N. Y.	13,653	24	12	1.758	2.00
Logansport, Ind.	21,338	19	14	.890	1.36
Long Beach, Calif.	29,163	52	39	1.783	1.79
Long Branch, N. J.	15,733	18	8	1.144	2.25
Lorain, Ohio.	38,206	18	31	.....	.....
Ludington, Mich.	10,566	2	.....	.189	.....
Lynchburg, Va.	38,497	60	59	1.791	1.02
McKeesport, Pa.	48,299	15	27	.....	.....
McKees Rocks, Pa.	20,795	9	.....	.433	.....
Manchester, Conn.	15,859	64	17	4.036	3.76
Manchester, N. H.	79,607	156	68	1.960	2.29
Manistee, Mich.	[1] 12,381	9	11	.....	.....
Manitowoc, Wis.	13,931	11	10	.790	1.40
Mankato, Minn.	[1] 10,365	8	10	.....	.....
Mansfield, Ohio.	23,051	35	27	1.518	1.30
Marinette, Wis.	[1] 14,610	1	17	.....	.....
Marion, Ind.	19,923	8	18	.....	.....
Marlboro, Mass.	15,285	39	6	2.552	6.50
Mason City, Iowa.	14,938	2	.....	.134	.....
Massillon, Ohio.	15,509	12	8	.774	1.50
Medford, Mass.	26,681	36	.....	1.349	.....
Melrose, Mass.	17,724	18	10	1.016	1.80
Menominee, Mich.	[1] 10,507	17	7	1.618	2.43
Methuen, Mass.	14,339	14	14	.978	1.00
Michigan City, Ind.	21,913	14	21	.....	.....
Middletown, N. Y.	15,980	54	30	3.398	1.80
Middletown, Ohio.	16,384	32	27	1.953	1.19
Milford, Mass.	14,280	14	11	.980	1.27
Millville, N. J.	13,813	23	8	1.665	2.88
Mishawaka, Ind.	17,083	11	6	.644	1.83
Missoula, Mont.	19,075	1	8	.....	.....
Mobile, Ala.	59,201	145	122	2.449	1.19
Monessen, Pa.	23,270	21	.....	.910	.....
Montclair, N. J.	27,067	64	19	2.363	3.37
Montgomery, Ala.	44,039	30	55	.....	.....
Mount Vernon, Ohio.	19,877	3	3	.276	1.00
Muncie, Ind.	25,653	23	22	.897	1.05
Muskegon, Mich.	27,434	6	.....	.219	.....
Nanticoke, Pa.	22,811	42	.....	1.764	.....
Natick, Mass.	10,140	10	8	.986	1.25
New Albany, Ind.	22,629	12	48	.....	.....
New Britain, Conn.	55,385	108	48	1.950	2.25
New Brunswick, N. J.	25,855	63	.....	2.437	.....
Newburgh, N. Y.	29,893	67	87	.....	.....
Newburyport, Mass.	15,291	14	6	.916	2.33
New Castle, Pa.	41,915	48	.....	1.145	.....
New London, Conn.	21,199	41	23	1.934	1.78
Newport News, Va.	22,622	46	20	2.122	1.60
Newport, R. I.	30,585	31	28	1.014	1.11
New Rochelle, N. Y.	29,192	34	11	.868	3.09
Newton, Mass.	44,345	33	.....	.744	.....
Norristown, Pa.	31,989	18	28	.....	.....
North Adams, Mass.	[1] 22,019	43	10	1.953	4.30

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (PULMONARY)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Number of cases reported for each death registered.
Northampton, Mass	20,006	111	60	5.548	1.85
North Attleboro, Mass	11,248	18	6	1.600	3.00
North Tonawanda, N. Y	14,060	16	11	1.138	1.45
North Yakima, Wash	22,058	22	17	.997	1.29
Norwalk, Conn	27,332	25	25	.915	1.00
Norwich, Conn	21,923	24		1.095	
Oak Park, Ill	27,816	12	13		
Oil City, Pa	20,162	63	6	3.125	10.50
Orange, N. J	33,636	71		2.111	
Ossining, N. Y	14,064	34	18	2.418	1.89
Oswego, N. Y	24,249	32	19	1.321	1.68
Owosso, Mich	10,326	30	1	2.906	30.00
Parkersburg, W. Va	21,059	13	31		
Passadena, Calif	49,020	93	82	1.874	1.13
Passaic, N. J	74,478	63	73		
Peabody, Mass	18,785	57	16	3.034	3.56
Peekskill, N. Y	19,034	32	20	1.681	1.60
Peru, Ind	12,491	8	8	.640	1.00
Phoenixville, Pa	11,871	9		.758	
Pine Bluff, Ark	17,777	10		.563	
Piqua, Ohio	14,275	25	21	1.751	1.19
Pittsfield, Mass	39,073	101	44	2.585	2.30
Pittston, Pa	18,975	5		.264	
Plainfield, N. J	24,330	51	18	2.096	2.83
Plattsburg, N. Y	13,111	14	12	1.068	1.17
Plymouth, Mass	14,001	12	15		
Plymouth, Pa	19,439	44	4	2.263	11.00
Pomona, Calif	13,624	15	12	1.101	1.25
Pontiac, Mich	18,006	83	14	4.610	5.93
Port Chester, N. Y	16,727	25	12	1.495	2.08
Port Huron, Mich	[1] 18,463	6	5	.318	1.20
Portland, Me	64,720	146	57	2.256	2.56
Pottsville, Pa	22,717	27	25	1.188	1.08
Pinxsutawney (Greater), Pa	10,745	9	5	.838	1.80
Quincy, Ill	36,812	10	34		
Quincy, Mass	39,022	87	42	2.230	2.07
Racine, Wis	47,465	30	40		
Raleigh, N. C	20,274	80	45	3.946	1.78
Redlands, Calif	14,573	27	29		
Richmond, Ind	26,080	35	29	1.342	1.21
Roanoke, Va	44,282	115	64	2.596	1.80
Rockford, Ill	56,739	94	49	1.657	1.92
Rock Island, Ill	29,452	11	34		
Rocky Mount, N. C	12,673	42	15	3.314	2.80
Sacramento, Calif	68,944	158	152	2.290	1.04
St. Joseph, Mo	80,408	92	92	1.044	1.00
Salem, Mass	49,346	104	47	2.108	2.21
Salem, Oreg	21,274	11	3	.517	3.67
San Bernardino, Calif	17,616	7	30		
Sandusky, Ohio	20,226	30	17	1.483	1.76
Sanford, Me	11,217	5	4	.446	1.25
San Jose, Calif	39,510	49	49	1.231	1.00
Santa Ana, Calif	10,981	28	12	2.550	2.33
Santa Barbara, Calif	15,360	13	11	.846	1.18
Saratoga Springs, N. Y	13,539	31	11	2.289	2.82
Sault Ste. Marie, Mich	14,130	14	9	.991	1.55
Selma, Ala	15,945	40	32	2.509	1.25
Shawnee, Okla	19,051	16	4	.840	4.00
Sheboygan, Wis	28,207	26	15	.922	1.73
Shelbyville, Ind	11,201	27	27	2.410	1.00
Somerville, Mass	88,613	164	74	1.851	2.22
South Bethlehem, Pa	24,886	69		2.773	
Southbridge, Mass	14,465	11	8	.760	1.38
Springfield, Ill	62,623	53	53	.846	1.00
Springfield, Ohio	52,206	97	84	1.858	1.15
Steelton, Pa	15,789	92	15	5.828	6.13
Steubenville, Ohio	28,209	13		.461	
Streator, Ill	14,313	4	2	.279	2.00
Taunton, Mass	36,810	84	67	2.284	1.25
Terre Haute, Ind	67,361	14	45		
Tiffin, Ohio	12,982	2	14		
Troy, N. Y	75,094	205	106	2.729	1.93

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (PULMONARY)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Number of cases reported for each death registered.
Tuscaloosa, Ala.	10,824	35	22	3.234	1.59
Utica, N. Y.	89,272	144	75	1.613	1.92
Vancouver, Wash.	13,805	6	12	.....	.....
Waco, Tex.	34,015	56	51	1.646	1.10
Walla Walla, Wash.	26,067	61	10	2.340	6.10
Waltham, Mass.	31,011	37	28	1.193	1.32
Warren, Ohio.	13,308	14	13	1.052	1.08
Warren, Pa.	15,083	48	12	3.182	4.00
Washington, Pa.	22,076	34	.....	1.540	.....
Waterbury, Conn.	89,201	99	81	1.110	1.22
Watertown, Mass.	15,188	34	16	2.239	2.13
Watertown, N. Y.	30,404	86	18	2.829	4.78
Wausau, Wis.	19,666	3	10	.....	.....
Webster, Mass.	12,484	14	4	1.038	3.50
West Chester, Pa.	13,403	16	20	.....	.....
Westfield, Mass.	18,769	50	11	2.664	4.55
West Hoboken, N. J.	44,386	106	29	2.388	3.66
West Orange, N. J.	13,964	35	24	2.506	1.46
Wheeling, W. Va.	43,657	46	50	.....	.....
Wichita Falls, Tex.	12,749	10	4	.784	2.50
Wichita, Kans.	73,597	95	.....	1.291	.....
Wilkinsburg, Pa.	23,899	28	16	1.088	1.63
Winchester, Mass.	10,812	3	6	.....	.....
Winona, Minn.	[1] 18,583	22	22	1.184	1.00
Winston-Salem, N. C.	33,136	126	93	3.801	1.35
Winthrop, Mass.	13,105	19	5	1.450	3.80
Woburn, Mass.	16,076	28	21	1.742	1.33
Zanesville, Ohio.	31,320	33	43	.....	.....

TUBERCULOSIS (ALL FORMS).[2]

Aberdeen, S. Dak.	15,926	15	.....	0.942	.....
Adrian, Mich.	11,570	3	7	.....	.....
Alameda, Cal.	28,433	27	24	.950	1.13
Alton, Ill.	23,783	20	.....	.841	.....
Altoona, Pa.	59,712	38	34	.636	1.12
Amsterdam, N. Y.	38,043	99	30	2.602	3.30
Anaconda, Mont.	10,631	5	5	.470	1.00
Ansonia, Conn.	16,954	39	39	2.300	1.00
Appleton, Wis.	18,005	20	20	1.111	1.00
Arlington, Mass.	13,073	27	17	2.065	1.59
Asbury Park, N. J.	14,629	20	7	1.367	2.86
Asheville, N. C.	25,656	269	134	10.485	2.01
Ashtabula, Ohio.	22,008	18	23	.....	.....
Astoria, Oreg.	10,487	28	28	2.670	1.00
Atlantic City, N. J.	59,515	271	39	4.553	6.95
Attleboro, Mass.	19,776	33	23	1.669	1.43
Augusta, Me.	14,325	26	26	1.815	1.00
Aurora, Ill.	34,795	3	36	.....	.....
Batavia, N. Y.	13,595	23	.....	1,692	.....
Bayonne, N. J.	72,204	124	.....	1.717	.....
Beacon, N. Y.	11,674	39	18	3.341	2.17
Beatrice, Nebr.	10,437	7	7	.671	1.00
Beaumont, Tex.	28,851	42	42	1.456	1.00
Belleville, N. J.	12,797	34	16	2.657	2.13
Beloit, Wis.	18,547	6	14	.....	.....
Benton Harbor, Mich.	11,099	12	12	1.081	1.00
Berkeley, Calif.	00,427	64	33	1.069	1.94
Bethlehem, Pa.	14,353	10	14	.....	.....
Beverly, Mass.	22,128	38	.....	1.717	.....
Binghamton, N. Y.	54,864	104	75	1.896	1.39
Bloomfield, N. J.	19,013	39	19	2.051	2.05
Bloomington, Ind.	11,661	18	17	1.544	1.06
Bradford, Pa.	[1] 14,544	12	.....	.825	.....
Bristol, Conn.	16,318	37	18	2.267	2.06
Bristol, Pa.	10,826	5	13	.....	.....
Brockton, Mass.	66,152	137	44	1.981	3.11
Brookline, Mass.	33,536	45	17	1.342	2.65
Cairo, Ill.	15,995	26	49	.....	.....
Canton, Ohio.	62,566	55	50	.879	1.10

[1] Population Apr. 15, 1910.
[2] Cities in which no cases of this disease were reported are not included in this table.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (ALL FORMS)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Number of cases reported for each death registered.
Cape Girardeau, Mo.	11,146	16	16	1.435	1.00
Carnegie, Pa.	11,963	7	11	.....	.....
Chambersburg, Pa.	12,475	6	.....	.481	.....
Charleston, W. Va.	31,090	37	57	.....	.....
Chelsea, Mass.	48,405	152	54	3.140	2.81
Chicopee, Mass.	29,990	103	63	3.430	1.63
Cicero, Ill.	26,846	50	.....	2.360	.....
Cleburne, Tex.	12,553	8	8	.637	1.00
Clinton, Mass.	[1] 13,073	19	17	1.453	1.12
Coffeyville, Kans.	18,331	31	15	1.691	2.07
Colorado Springs, Colo.	38,963	396	142	10.163	2.79
Concord, N. H.	22,858	15	23	.....	.....
Corning, N. Y.	15,070	16	16	1.021	1.00
Cortland, N. Y.	18,321	26	8	1.982	3.25
Coshocton, Ohio.	11,887	5	9	.....	.....
Cranston, R. I.	26,773	6	.....	.225	.....
Cumberland, Md.	26,696	81	21	3.033	2.86
Cumberland, R. I.	10,998	8	9	.....	.....
Danville, Ill.	32,969	50	39	1.517	1.28
Dedham, Mass.	10,618	11	9	1.036	1.22
Duluth, Minn.	97,077	251	103	2.586	2.44
Dunkirk, N. Y.	21,311	14	17	.....	.....
Durham, N. C.	26,100	32	44	.....	.....
Easthampton, Mass.	10,656	18	11	1.690	1.64
Easton, Pa.	30,534	43	36	1.394	1.19
East Orange, N. J.	43,761	99	63	1.577	1.60
East St. Louis, Ill.	77,312	113	105	1.462	1.08
Eau Claire, Wis.	18,987	34	22	1.800	1.55
Edwardsville, Pa.	10,771	22	7	2.043	3.14
Elgin, Ill.	28,562	18	16	.630	1.13
Elizabeth, N. J.	86,830	267	140	3.005	1.91
Englewood, N. J.	12,603	22	2	1.746	11.00
Erie, Pa.	76,592	262	119	3.421	2.20
Escanaba, Mich.	15,854	36	19	2.271	1.89
Eugene, Oreg.	14,257	9	9	.631	1.00
Evansville, Ind.	76,981	130	134	1.689	1.05
Everett, Mass.	40,160	82	35	2.042	2.28
Everett, Wash.	37,205	24	20	.645	1.20
Fairmont, W. Va.	16,111	4	6	.....	.....
Fargo, N. Dak.	17,872	28	10	1.567	2.80
Findlay, Ohio.	[1] 14,858	13	13	.875	1.00
Fitchburg, Mass.	42,419	124	47	2.923	2.64
Flint, Mich.	57,393	158	44	2.753	3.59
Fond du Lac, Wis.	21,486	20	20	.931	1.00
Fort Scott, Kans.	10,504	13	2	1.238	6.50
Fostoria, Ohio.	10,959	8	14	.....	.....
Framingham, Mass.	14,149	58	17	4.099	3.41
Frederick, Md.	11,225	6	7	.....	.....
Freeport, Ill.	19,844	42	20	2.117	2.10
Fremont, Ohio.	11,034	14	14	1.269	1.00
Fresno, Calif.	34,314	40	74	.....	.....
Fulton, N. Y.	12,138	21	3	1.730	7.00
Galveston, Tex.	42,650	32	67	.....	.....
Gardner, Mass.	17,534	35	21	1.996	1.67
Gary, Ind.	56,000	16	27	.....	.....
Gloucester City, N. J.	11,375	10	16	.....	.....
Gloversville, N. Y.	22,314	82	20	2.330	2.05
Great Falls, Mont.	[1] 13,948	14	8	1.004	1.75
Green Bay, Wis.	30,017	34	24	1.133	1.42
Greenfield, Mass.	12,251	16	8	1.306	2.00
Hackensack, N. J.	17,412	25	7	1.436	3.57
Hamilton, Ohio.	41,338	61	39	1.476	1.56
Harrisburg, Pa.	73,276	171	67	2.334	2.55
Haverhill, Mass.	49,180	137	61	2.786	2.25
Hoboken, N. J.	78,334	213	135	2.719	1.58
Hornell, N. Y.	14,857	12	10	.808	1.20
Hudson, N. Y.	12,898	39	14	3.024	2.79
Hutchinson, Kans.	21,461	19	11	.886	1.73
Independence, Kans.	15,111	8	4	.530	2.00
Irvington, N. J.	16,710	84	22	5.026	3.82
Ishpeming, Mich.	[1] 12,448	9	9	.723	1.00
Ithaca, N. Y.	14,017	56	12	3.995	4.66
Jackson, Mich.	35,986	89	47	2.473	1.77

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (ALL FORMS)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants	Number of cases reported for each death registered
Jacksonville, Ill	15,506	30	20	1.934	1.50
Jamestown, N. Y	37,431	68	53	1.817	1.28
Janesville, Wis	14,411	30	15	2.082	2.00
Jeffersonville, Ind	[1] 10,412	12	11	1.153	1.09
Joliet, Ill	38,549	30	13	.778	2.31
Kalamazoo, Mich	50,408	114	6	2.262	19.00
Kankakee, Ill	14,270	9	36	.....	.....
Kearny, N. J	24,325	59	17	2.425	3.47
Kenosha, Wis	32,833	30	17	.914	1.76
Kewanee, Ill	13,607	3	.....	.220	.....
Kingston, N. Y	28,910	82	55	3.010	1.49
Kokomo, Ind	21,929	38	25	1.733	1.52
Lackawanna, N. Y	16,219	60	14	3.699	4.29
La Crosse, Wis	31,833	32	36	.....	.....
Lancaster, Pa	51,437	45	45	.875	1.00
Lansing, Mich	44,499	38	1	.854	38.00
La Salle, Ill	12,332	23	16	1.865	1.44
Laurium, Mich	10,649	16	6	1.502	2.67
Leavenworth, Kans	[1] 19,363	27	19	1.394	1.42
Lebanon, Pa	20,947	47	.....	2.244	.....
Leominster, Mass	21,365	54	14	2.527	3.86
Lexington, Ky	41,997	137	120	3.262	1.14
Lincoln, Nebr	46,957	27	33	.....	.....
Logansport, Ind	21,338	23	14	1.078	1.64
Long Beach, Calif	29,163	75	71	2.572	1.06
Long Branch, N. J	15,733	26	10	1.653	2.60
Ludington, Mich	10,566	3	.....	.284	.....
McKees Rocks, Pa	20,795	17	.....	.818	.....
Madison, Wis	31,315	22	19	.703	1.16
Malden, Mass	52,243	93	36	1.780	2.58
Manitowoc, Wis	13,931	13	12	.938	1.08
Marion, Ind	19,923	8	23	.....	.....
Marlboro, Mass	15,285	46	9	3.009	5.11
Marquette, Mich	12,555	23	12	1.832	1.92
Martinsburg, W. Va	12,984	2	1	.154	2.00
Maywood, Ill	10,903	7	10	.....	.....
Medford, Mass	26,681	38	22	1.424	1.73
Medford, Oreg	14,932	1	.....	.067	.....
Melrose, Mass	17,724	19	11	1.072	1.73
Meriden, Conn	29,431	45	120	.....	.....
Methuen, Mass	14,320	16	18	.....	.....
Middletown, N. Y	15,890	57	33	3.587	1.73
Middletown, Ohio	16,384	36	31	2.197	1.16
Milford, Mass	14,280	18	14	1.261	1.29
Mishawaka, Ind	17,083	12	7	.703	1.71
Montclair, N. J	27,087	74	24	2.732	3.08
Morgantown, W. Va	14,444	9	.....	.623	.....
Morristown, N. J	13,410	20	14	1.491	1.43
Mount Vernon, N. Y	37,991	51	21	1.342	2.43
Muncie, Ind	25,653	27	26	1.053	1.04
New Britain, Conn	55,385	109	61	1.968	1.79
New Castle, Pa	41,915	61	39	1.455	1.56
New London, Conn	21,199	47	29	2.217	1.62
Newton, Mass	44,345	38	16	.857	2.38
Niagara Falls, N. Y	38,466	115	41	2.990	2.80
Northampton, Mass	20,006	114	62	5.698	1.84
North Attleboro, Mass	11,248	18	7	1.600	2.57
North Braddock, Pa	15,684	24	10	1.530	2.40
North Tonawanda, N. Y	14,060	18	14	1.280	1.29
North Yakima, Wash	22,058	22	21	.997	1.05
Norwich, Conn	21,923	25	.....	1.140	.....
Norwood, Ohio	23,269	28	15	1.203	1.87
Oak Park, Ill	27,816	13	23	.....	.....
Ogden, Utah	32,343	13	13	.402	1.00
Oklahoma City, Okla	97,588	11	82	.....	.....
Orange, N. J	33,636	88	63	2.616	1.40
Oshkosh, Wis	36,549	46	32	1.259	1.44
Passaic, N. J	74,478	132	91	1.772	1.45
Peabody, Mass	18,785	63	19	3.354	3.32
Peekskill, N. Y	19,034	38	26	1.996	1.46
Peoria, Ill	72,184	85	80	1.178	1.06
Perth Amboy, N. J	42,646	102	42	2.392	2.43

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TUBERCULOSIS (ALL FORMS)—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Number of cases reported for each death registered.
Peru, Ind	12,491	9	9	0.721	1.00
Petersburg, Va	25,817	78	78	3.021	1.00
Phillipsburg, N. J	18,879	19	11	1.197	1.73
Pine Bluff, Ark	17,777	14	.....	.788	.....
Pittsfield, Mass	39,678	118	50	2.986	2.30
Plainfield, N. J	24,330	53	19	2.178	2.79
Plymouth, Mass	14,001	14	17	.....	.....
Pontiac, Mich	18,006	98	20	5.443	4.90
Port Chester, N. Y	16,727	25	18	1.496	1.39
Portland, Me	64,720	169	75	2.611	2.25
Portsmouth, N. H	11,730	10	10	.853	1.00
Poughkeepsie, N. Y	30,786	125	31	4.060	3.00
Pueblo, Colo	56,084	23	68	.....	.....
Quincy, Mass	39,022	104	46	2.666	2.26
Racine, Wis	47,465	30	49	.....	.....
Redlands, Calif	14,572	29	31	.....	.....
Richmond, Ind	25,080	40	40	1.596	1.00
Rockford, Ill	85,739	98	49	1.727	2.00
Rock Island, Ill	29,452	11	23	.....	.....
Rocky Mount, N. C	12,673	45	18	3.551	2.50
Rome, Ga	15,007	5	3	.330	1.67
Rome, N. Y	24,259	111	114	.....	.....
Sacramento, Calif	68,984	158	150	.....	.....
Saginaw, Mich	86,469	138	57	2.444	2.42
Saint Joseph, Mo	85,498	106	106	1.225	1.00
Salem, Mass	49,346	130	61	2.631	2.13
Salem, Oreg	21,274	14	4	.656	3.50
San Diego, Calif	56,412	251	139	4.449	1.81
San Jose, Calif	39,810	50	43	1.255	1.16
Santa Ana, Calif	10,981	30	15	2.732	2.00
Saratoga Springs, N. Y	13,839	31	13	2.240	2.38
Sault Ste. Marie, Mich	14,120	16	11	1.133	1.45
Sheboygan, Wis	28,907	39	26	1.349	1.50
Shelbyville, Ind	11,201	30	30	2.678	1.00
Somerville, Mass	88,618	184	85	2.076	2.16
South Bend, Ind	70,987	41	65	.....	.....
South Bethlehem, Pa	24,886	76	.....	3.054	.....
Southbridge, Mass	14,465	24	11	1.659	2.18
Spartanburg, S. C	21,985	19	52	.....	.....
Springfield, Ill	62,023	66	66	1.064	1.00
Springfield, Ohio	52,206	105	86	2.011	1.22
Stamford, Conn	31,810	69	9	2.169	7.67
Steubenville, Ohio	28,259	23	23	.814	1.00
Stockton, Calif	36,209	35	12	.967	2.92
Tampa, Fla	56,261	48	78	.....	.....
Taunton, Mass	36,610	89	77	2.431	1.16
Taylor, Pa	12,563	7	.....	.567	.....
Tiffin, Ohio	12,962	7	22	.....	.....
Topeka, Kans	49,538	70	31	1.413	2.23
Utica, N. Y	89,272	178	109	1.994	1.63
Vancouver, Wash	13,805	6	13	.....	.....
Walla Walla, Wash	20,067	66	12	2.583	5.50
Waltham, Mass	31,011	40	37	1.290	1.08
Warren, Ohio	13,308	15	13	1.127	1.15
Warren, Pa	15,083	55	13	3.648	4.23
Washington, Pa	22,076	35	.....	1.585	.....
Watertown, Mass	15,198	37	17	2.436	2.18
Westfield, Mass	18,769	52	13	2.771	4.00
West Hoboken, N. J	44,393	111	34	2.501	3.26
West New York, N. J	19,613	41	.....	2.090	.....
West Orange, N. J	13,964	35	27	2.508	1.30
Wheeling, W. Va	43,687	47	72	.....	.....
White Plains, N. Y	23,331	43	21	1.843	2.05
Wichita, Kans	73,597	107	23	1.454	3.74
Wilkes-Barre, Pa	73,334	169	62	2.043	3.82
Wilmington, N. C	30,400	20	65	.....	.....
Winchester, Mass	10,812	4	7	.....	.....
Winona, Minn	[1]16,563	28	28	1.867	1.00
Winthrop, Mass	13,105	22	5	1.679	4.40
Woburn, Mass	16,076	32	21	1.991	1.52

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TYPHOID FEVER.[1]

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Aberdeen, S. Dak	15,926	11	.....	0.691	.....
Aberdeen, Wash	21,392	13	4	.608	30.77
Adams, Mass	14,406	12	1	.833	8.33
Adrian, Mich	11,570	7	2	.605	28.57
Akron, Ohio	93,604	105	33	1.122	31.43
Alameda, Calif	28,433	14	3	.492	21.43
Albuquerque, N. Mex	14,509	1	6	.....	.....
Alexandria, La	16,232	6	5	.370	83.33
Alexandria, Va	17,939	11	9	.613	81.82
Alpena, Mich	13,365	22	3	1.646	13.64
Alton, Ill	23,783	25	.....	1.051	.....
Altoona, Pa	59,712	61	19	1.022	31.15
Amarillo, Tex	20,882	12	3	.575	25.00
Amesbury, Mass	10,200	12	1	1.176	8.33
Amsterdam, N. Y	38,043	6	.....	.158	.....
Anderson, Ind	24,230	21	2	.867	9.52
Ann Arbor, Mich	15,041	26	2	1.729	7.69
Anniston, Ala	14,326	116	13	8.097	11.21
Ansonia, Conn	16,954	1	1	.059	100.00
Appleton, Wis	18,005	3	.....	.167	.....
Arlington, Mass	13,073	8	2	.612	25.00
Asbury Park, N. J	14,629	7	.....	.479	.....
Asheville, N. C	25,656	48	11	1.871	22.92
Ashtabula, Ohio	22,008	5	2	.227	40.00
Astoria, Oreg	10,487	13	3	1.240	23.08
Atchison, Kans	16,785	28	.....	1.668	.....
Atlantic City, N. J	59,515	28	4	.470	14.29
Attleboro, Mass	19,776	4	.....	.202	.....
Auburn, N. Y	37,823	10	2	.264	20.00
Augusta, Me	14,325	2	.....	.140	.....
Aurora, Ill	34,795	12	3	.345	25.00
Austin, Tex	35,612	17	9	.477	52.94
Bakersfield, Calif	17,543	8	4	.456	50.00
Bangor, Me	24,958	55	14	2.040	25.45
Barberton, Ohio	14,187	2	.....	.141	.....
Barre, Vt	12,401	1	1	.081	100.00
Batavia, N. Y	13,595	12	2	.883	16.67
Battle Creek, Mich	30,159	14	3	.464	21.43
Bay City, Mich	48,390	32	6	.661	18.75
Bayonne, N. J	72,204	8	.....	.111	.....
Beacon, N. Y	11,674	2	.....	.171	.....
Beatrice, Nebr	10,437	36	4	3.449	11.11
Beaumont, Tex	28,851	16	8	.555	50.00
Beaver Falls, Pa	13,749	43	.....	3.128	.....
Bedford, Ind	10,613	28	4	2.638	14.29
Bellaire, Ohio	14,575	20	1	1.372	5.00
Belleville, N. J	12,797	3	.....	.234	.....
Beloit, Wis	18,547	2	4	.....	.....
Benton Harbor, Mich	11,099	4	1	.360	25.00
Berkeley, Calif	60,427	16	.....	.265	.....
Berlin, N. H	13,892	6	1	.432	16.67
Bessemer, Ala	17,156	66	22	3.847	33.33
Bethlehem, Pa	14,353	11	3	.766	27.27
Beverly, Mass	22,128	8	1	.362	12.50
Billings, Mont	15,123	18	7	1.190	38.89
Binghamton, N. Y	54,864	12	4	.219	33.33
Bloomfield, N. J	19,013	9	.....	.473	.....
Bloomington, Ind	11,661	2	1	.172	50.00
Boise, Idaho	35,951	4	.....	.111	.....
Braddock, Pa	22,060	17	5	.771	29.41
Bradford, Pa	[2] 14,544	6	.....	.413	.....
Brazil, Ind	10,472	3	.....	.286	.....
Bridgeton, N. J	14,423	5	.....	.347	.....
Bristol, Conn	16,318	4	.....	.245	.....
Bristol, Pa	10,826	2	.....	.185	.....
Brockton, Mass	69,152	14	.....	.202	.....
Brookline, Mass	33,526	6	.....	.179	.....
Brunswick, Ga	10,984	14	3	1.275	21.43
Burlington, Vt	21,802	9	1	.413	11.11
Butler, Pa	28,677	5	.....	.174	.....
Cairo, Ill	15,995	12	8	.750	66.67
Cambridge, Ohio	13,804	8	1	.580	12.50
Canton, Ohio	62,566	30	10	.479	33.33

[1] Cities in which no cases of this disease were reported are not included in this table.
[2] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TYPHOID FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Cape Girardeau, Mo	11,146	3	3	0.269	100.00
Carbondale, Pa	19,597	1	1	.051	100.00
Carlisle, Pa	10,795	1	...	.093	...
Carnegie, Pa	11,963	9	...	.752	...
Cedar Rapids, Iowa	38,033	60	10	1.614	14.49
Central Falls, R. I	26,101	2	...	.077	...
Centralia, Ill	11,838	10	...	.845	...
Chambersburg, Pa	12,475	9	...	.721	...
Charleston, S. C	61,041	97	11	1.589	11.34
Charleston, W. Va	31,060	278	15	8.950	5.40
Chelsea, Mass	18,405	34	3	.702	8.82
Chester, Pa	41,857	38	8	.908	21.05
Cheyenne, Wyo	[1]11,320	2	...	.177	...
Chicago Heights, Ill	22,843	5	1	.219	20.00
Chicopee, Mass	29,950	4	...	.134	...
Chillicothe, Ohio	15,625	13	5	.832	38.46
Cicero, Ill	20,846	15	...	.720	...
Cleburne, Tex	12,533	31	3	2.470	9.68
Clinton, Iowa	27,678	13	1	.470	7.69
Clinton, Mass	[1]13,075	1	...	.076	...
Coatesville, Pa	14,998	49	7	3.267	14.29
Coffeyville, Kans	18,531	54	9	2.946	16.67
Cohoes, N. Y	25,292	6	2	.237	33.33
Colorado Springs, Colo	38,965	48	2	1.232	4.17
Columbus, Ga	26,005	52	6	1.977	11.54
Concord, N. H	22,858	5	...	.219	...
Connellsville, Pa	15,876	11	...	.693	...
Corning, N. Y	15,676	17	4	1.084	23.53
Corsicana, Tex	10,066	25	3	2.484	12.00
Cortland, N. Y	13,321	10	...	.751	...
Coshocton, Ohio	11,887	5	2	.421	40.00
Covington, Ky	59,623	30	8	.503	26.67
Cranston, R. I	26,773	2	...	.075	...
Crawfordsville, Ind	11,443	5	...	.437	...
Cumberland, Md	26,486	33	4	1.247	12.12
Cumberland, R. I	10,968	1	...	.091	...
Danbury, Conn	22,931	9	2	.392	22.22
Danville, Ill	32,969	26	...	.789	...
Davenport, Iowa	49,618	13	...	.262	...
Decatur, Ill	41,483	99	21	2.387	21.21
Dedham, Mass	10,618	5	1	.471	20.00
Dover, N. H	13,276	3	...	.226	...
Du Bois, Pa	14,994	7	...	.467	...
Dubuque, Iowa	40,096	1	2	...	...
Duluth, Minn	97,067	40	4	.412	10.00
Dunkirk, N. Y	21,311	6	1	.282	16.67
Dunmore, Pa	21,286	2	...	.094	...
Durham, N. C	26,160	60	8	2.294	13.33
East Chicago, Ind	30,286	94	20	3.104	21.28
Easthampton, Mass	10,656	1	...	.094	...
Easton, Pa	30,854	19	...	.616	...
East Orange, N. J	43,761	10	2	.229	20.00
East St. Louis, Ill	77,312	12	7	.155	58.33
Eau Claire, Wis	18,887	43	1	2.277	2.33
Elgin, Ill	28,962	7	2	.245	28.57
Elizabeth, N. J	88,830	50	6	.563	12.00
Elmira, N. Y	38,272	40	5	1.045	12.50
El Paso, Tex	69,119	45	32	.651	71.11
Elwood, Ind	[1]11,028	7	1	.635	14.29
Elyria, Ohio	19,731	1	2	...	...
Enfield, Conn	11,924	7	1	.587	14.29
Englewood, N. J	12,603	5	...	.397	...
Erie, Pa	76,592	65	9	.849	13.85
Escanaba, Mich	13,854	4	6	...	...
Eugene, Oreg	14,257	1	1	.070	100.00
Eureka, Calif	15,142	2	...	.132	...
Evanston, Ill	29,304	2	1	.068	50.00
Evansville, Ind	76,981	112	18	1.455	16.07
Everett, Mass	40,100	17	...	.423	...
Everett, Wash	37,205	32	2	.860	6.25
Fairmont, W. Va	16,111	25	11	1.552	44.00
Fargo, N. Dak	17,872	14	1	.783	7.14
Farrell, Pa	[1]10,190	14	4	1.374	28.57
Findlay, Ohio	[1]14,858	8	...	.538	...

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TYPHOID FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Fitchburg, Mass.	42,419	6	.....	0.141	.....
Flint, Mich.	57,386	137	26	2.387	18.98
Fond du Lac, Wis.	21,486	26	.....	1.210	.....
Fort Collins, Colo.	11,973	4	1	.334	25.00
Fort Scott, Kans.	10,564	15	4	1.420	26.67
Fort Wayne, Ind.	78,014	58	4	.743	6.90
Fostoria, Ohio.	10,959	14	3	1.277	21.43
Framingham, Mass.	14,149	1	.....	.071	.....
Franklin, Pa.	11,555	9	.....	.779	.....
Frederick, Md.	11,225	13	4	1.158	30.77
Freeport, Ill.	19,844	6	2	.302	33.33
Fremont, Ohio.	11,034	11	.....	.997	.....
Fresno, Calif.	36,314	19	9	.523	47.37
Fulton, N. Y.	12,138	2	.....	.165	.....
Galesburg, Ill.	24,629	45	3	1.827	6.67
Galveston, Tex.	42,650	49	7	1.149	14.28
Gardner, Mass.	17,534	94	8	5.361	8.51
Gary, Ind.	56,000	1	8	.....	.....
Glens Falls, N. Y.	17,160	4	2	.233	50.00
Gloucester City, N. J.	11,375	4	1	.352	25.00
Grand Forks, N. Dak.	16,342	1	.....	.061	.....
Grand Island, Nebr.	13,133	1	.....	.076	.....
Great Falls, Mont.	[1] 13,948	30	.....	2.151	.....
Green Bay, Wis.	30,017	7	1	.233	14.29
Greenfield, Mass.	12,251	4	.....	.327	.....
Greenville, S. C.	18,574	16	2	.861	12.50
Greenwich, Conn.	19,594	15	1	.766	6.67
Hackensack, N. J.	17,412	9	3	.517	33.33
Hamilton, Ohio.	41,338	14	4	.339	28.57
Hammond, Ind.	27,016	23	10	.851	43.48
Hannibal, Mo.	22,399	2	2	.089	100.00
Harrisburg, Pa.	73,276	29	11	.396	37.93
Harrison, N. J.	17,345	2	1	.115	50.00
Haverhill, Mass.	49,180	14	4	.285	28.57
Hazleton, Pa.	28,981	6	2	.207	33.33
Helena, Ark.	11,122	5	1	.450	20.00
Highland Park, Mich.	33,859	15	1	.443	6.67
Hoboken, N. J.	78,324	4	2	.051	50.00
Holyoke, Mass.	66,503	9	4	.135	44.44
Homestead, Pa.	23,071	35	4	1.517	11.43
Hornell, N. Y.	14,857	1	.....	.067	.....
Hot Springs, Ark.	17,699	31	10	1.752	32.26
Hudson, N. Y.	12,898	15	2	1.163	13.33
Huntington, Ind.	10,982	26	5	2,368	19.23
Hutchinson, Kans.	21,461	13	1	.607	7.69
Independence, Kans.	15,111	17	1	1.125	5.88
Ironwood, Mich.	15,095	4	2	.265	50.00
Irvington, N. J.	16,710	4	.....	.239	.....
Ishpeming, Mich.	[1] 12,448	1	1	.080	100.00
Ithaca, N. Y.	16,017	20	3	1.249	15.00
Jackson, Mich.	35,996	11	.....	.306	.....
Jacksonville, Fla.	79,065	108	18	1.341	16.98
Jacksonville, Ill.	15,506	39	4	2.515	10.26
Jamestown, N. Y.	37,431	22	.....	.588	.....
Jeffersonville, Ind.	[1] 10,412	1	1	.096	100.00
Joliet, Ill.	38,549	22	3	.571	13.64
Joplin, Mo.	33,400	8	26	.....	.....
Kalamazoo, Mich.	50,408	19	2	.377	10.53
Kankakee, Ill.	14,270	24	5	1.682	20.83
Kearny, N. J.	24,325	1	1	.041	100.00
Kenosha, Wis.	32,833	17	3	.518	17.65
Kewanee, Ill.	13,607	11	.....	.808	.....
Kingston, N. Y.	26,910	32	2	1.189	6.25
Kokomo, Ind.	21,929	35	4	1.596	11.43
Lackawanna, N. Y.	16,219	17	.....	1.048	.....
La Crosse, Wis.	31,833	4	.....	.126	.....
La Fayette, Ind.	21,481	12	7	.559	58.33
Lancaster, Pa.	51,437	32	5	.622	15.62
Lansford, Pa.	10,825	3	.....	.277	.....
Lansing, Mich.	44,499	24	.....	.539	.....
Laporte, Ind.	13,572	1	.....	.074	.....
La Salle, Ill.	12,332	11	.....	.892	.....
Latrobe, Pa.	11,815	3	.....	.254	.....
Laurium, Mich.	10,649	4	.....	.376	.....
Leavenworth, Kans.	[1] 19,363	212	19	10.949	8.96

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TYPHOID FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Lebanon, Pa	20,947	29	6	1.384	20.68
Leominster, Mass	21,365	3	1	.140	33.33
Lewistown, Pa	11,126	2	1	.180	50.00
Lexington, Ky	41,997	60	16	1.429	26.67
Lima, Ohio	37,145	21	4	.565	19.05
Lincoln, Ill	11,991	18	3	1.501	16.67
Lincoln, Nebr	46,957	21	4	.447	19.05
Little Falls, N. Y	13,653	4	4	.293	100.00
Logansport, Ind	21,338	11	1	.516	9.09
Long Beach, Calif	29,163	15	2	.514	13.33
Long Branch, N. J	15,733	22	2	1.398	9.09
Lorain, Ohio	38,266	7	3	.183	42.86
Ludington, Mich	10,566	3	1	.284	33.33
Lynchburg, Va	33,497	118	6	3.523	5.08
McKeesport, Pa	48,299	17	4	.352	23.53
McKee's Rocks, Pa	20,795	10	.....	.481	.....
Macon, Ga	46,099	55	16	1.193	29.09
Madison, Wis	31,315	6	.....	.192	.....
Malden, Mass	52,243	8	.....	.153	.....
Manchester, Conn	15,859	2	.....	.126	.....
Manchester, N. H	79,607	12	7	.151	58.33
Manistee, Mich	[1] 12,381	10	2	.808	20.00
Manitowoc, Wis	13,931	5	1	.359	20.00
Mankato, Minn	[1] 10,365	7	1	.675	14.29
Mansfield, Ohio	23,051	11	2	.477	18.18
Marinette, Wis	[1] 14,610	3	.....	.205	.....
Marlboro, Mass	15,285	2	.....	.131	.....
Marquette, Mich	12,555	33	5	2.628	15.15
Martinsburg, W. Va	12,984	16	2	1.232	12.50
Mason City, Iowa	14,938	4	.....	.268	.....
Massillon, Ohio	16,800	3	1	.193	33.33
Maywood, Ill	10,903	1	.....	.092	.....
Medford, Mass	26,681	13	1	.487	7.69
Medford, Oreg	14,932	2	1	.134	50.00
Melrose, Mass	17,724	3	.....	.169	.....
Menominee, Mich	[1] 10,507	11	.....	1.047	.....
Meriden, Conn	29,431	8	1	.272	12.5
Methuen, Mass	14,320	7	.....	.489	.....
Michigan City, Ind	21,913	29	1	1.323	3.45
Middletown, N. Y	15,800	1	.....	.063	.....
Middletown, Ohio	16,384	9	1	.549	11.11
Milford, Mass	14,280	3	.....	.210	.....
Millville, N. J	13,813	20	.....	1.448	.....
Missoula, Mont	19,075	2	5	.....	.....
Mobile, Ala	59,261	51	20	.861	39.22
Moline, Ill	27,956	51	8	1.823	15.69
Monessen, Pa	23,070	13	2	.564	15.38
Montclair, N. J	27,087	8	1	.295	12.50
Montgomery, Ala	44,039	50	13	1.135	26.00
Morgantown, W. Va	14,444	13	.....	.900	.....
Morristown, N. J	13,410	5	4	.373	80.00
Mount Vernon, N. Y	37,991	22	2	.579	9.09
Mount Vernon, Ohio	10,877	1	3	.....	.....
Muncie, Ind	25,053	25	4	.975	16.00
Muskegon, Mich	27,434	4	2	.146	50.00
Natick, Mass	10,140	4	.....	.394	.....
New Albany, Ind	23,029	14	6	.592	42.86
New Britain, Conn	55,305	13	4	.235	30.77
New Brunswick, N. J	25,855	26	.....	1.005	.....
Newburgh, N. Y	29,803	4	.....	.134	.....
Newburyport, Mass	15,291	9	1	.589	11.11
New Castle, Ind	14,144	4	.....	.283	.....
New Castle, Pa	41,915	81	7	1.932	8.64
New London, Conn	21,199	17	3	.802	17.65
Newport News, Va	22,622	40	3	1.768	7.50
Newport, R. I	30,585	7	1	.229	14.29
New Rochelle, N. Y	39,192	6	1	.153	16.67
Newton, Mass	44,345	19	.....	.429	.....
Niagara Falls, N. Y	38,466	47	5	1.222	10.64
Norristown, Pa	31,969	23	3	.719	13.04
North Adams, Mass	[1] 22,019	15	4	.681	26.67
Northampton, Mass	20,000	2	.....	.100	.....
North Attleboro, Mass	11,208	1	.....	.089	.....
North Braddock, Pa	15,004	6	.....	.399	.....

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TYPHOID FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
North Tonawanda, N. Y.	14,060	11	1	0.782	9.09
North Yakima, Wash.	22,058	38	12	1.723	31.58
Norwalk, Conn.	27,332	13	3	.476	23.08
Norwich, Conn.	21,923	5	.....	.228	.....
Norwood, Ohio	23,269	4	.....	.172	.....
Oak Park, Ill.	27,816	4	2	.144	50.00
Ogden, Utah	32,343	11	5	.340	45.45
Oil City, Pa.	20,162	8	2	.397	25.00
Oklahoma City, Okla.	97,588	39	16	.400	41.03
Olean, N. Y.	16,927	5	1	.295	20.00
Orange, N. J.	33,636	1	.....	.030	.....
Oshkosh, Wis.	26,549	12	2	.328	16.67
Ossining, N. Y.	14,064	3	1	.213	33.33
Oswego, N. Y.	24,219	11	.....	.454	.....
Owosso, Mich.	10,326	3	1	.291	33.33
Parkersburg, W. Va.	21,089	16	2	.760	12.50
Pasadena, Calif.	49,620	8	5	.164	62.50
Passaic, N. J.	74,478	11	2	.148	18.18
Pawtucket, R. I.	60,666	16	3	.263	18.75
Peabody, Mass.	18,785	7	1	.373	14.29
Peekskill, N. Y.	19,034	2	.....	.105	.....
Pekin, Ill.	10,973	3	.....	.273	.....
Peoria, Ill.	72,184	8	2	.111	25.00
Perth Amboy, N. J.	42,646	22	1	.516	4.55
Peru, Ind.	12,491	2	2	.160	100.00
Petersburg, Va.	25,817	63	7	2.440	11.11
Phillipsburg, N. J.	15,879	2	.....	.126	.....
Phoenixville, Pa.	11,871	9	.....	.758	.....
Pine Bluff, Ark.	17,777	6	.....	.338	.....
Piqua, Ohio	14,275	9	3	.630	33.33
Pittsfield, Mass.	39,678	8	1	.202	12.50
Pittston, Pa.	18,975	2	.....	.105	.....
Plainfield, N. J.	24,330	6	.....	.247	.....
Plattsburg, N. Y.	13,111	17	4	1.297	23.53
Plymouth, Mass.	14,001	9	2	.643	22.22
Plymouth, Pa.	19,439	4	.....	.206	.....
Pontiac, Mich.	18,006	11	1	.611	9.09
Port Chester, N. Y.	16,727	5	.....	.299	.....
Port Huron, Mich.	[1] 18,863	16	2	.848	12.50
Portland, Me.	64,720	58	11	.896	18.97
Portsmouth, N. H.	11,730	3	.....	.256	.....
Portsmouth, Va.	40,898	23	4	.565	17.39
Pottsville, Pa.	22,717	7	2	.308	28.57
Poughkeepsie, N. Y.	30,788	13	3	.422	23.08
Pueblo, Colo.	56,064	38	2	.678	5.26
Punxsutawney (Greater), Pa.	10,745	1	2	.....	.....
Quincy, Ill.	36,832	19	7	.516	36.84
Quincy, Mass.	39,022	19	2	.487	10.53
Racine, Wis.	47,465	10	6	.211	60.00
Rahway, N. J.	10,361	1	.....	.097	.....
Raleigh, N. C.	20,274	20	10	.986	50.00
Redlands, Calif.	14,573	3	.....	.206	.....
Reno, Nev.	15,514	15	2	.967	13.33
Richmond, Ind.	25,080	5	3	.199	60.00
Roanoke, Va.	46,282	52	5	1.124	9.62
Rockford, Ill.	56,739	19	8	.335	42.11
Rock Island, Ill.	29,452	13	3	.441	23.08
Rocky Mount, N. C.	12,673	26	3	2.052	11.54
Rome, Ga.	15,607	9	1	.577	11.11
Rome, N. Y.	24,259	14	2	.577	14.29
Rutland, Vt.	15,038	10	3	.665	30.00
Sacramento, Calif.	68,984	46	5	.667	10.87
Saginaw, Mich.	56,469	44	6	.776	13.64
St. Joseph, Mo.	86,498	48	7	.555	14.58
Salem, Mass.	49,346	3	.....	.061	.....
Salem, Oreg.	21,274	1	.....	.047	.....
San Bernardino, Calif.	17,616	4	3	.227	75.00
San Diego, Calif.	56,412	62	8	1.099	12.90
Sandusky, Ohio	20,226	10	1	.494	10.00
Sanford, Me.	11,217	6	.....	.535	.....
San Jose, Calif.	39,810	13	2	.327	15.38
Santa Ana, Calif.	10,981	3	.....	.273	.....
Santa Barbara, Calif.	15,360	2	1	.130	50.00
Saratoga Springs, N. Y.	13,839	11	1	.796	9.09

[1] Population Apr. 15, 1910.

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REPORTED PREVALENCE FOR THE YEAR 1917—Continued.

TYPHOID FEVER—Continued.

City.	Estimated population July 1, 1917.	Cases reported.	Deaths registered.	Cases reported per 1,000 inhabitants.	Indicated fatality rate per 100 cases.
Sault Ste. Marie, Mich.	14,130	11	4	0.778	36.36
Selma, Ala.	15,945	27	10	1.693	37.04
Sharon, Pa.	19,158	13	3	.679	23.08
Shawnee, Okla.	19,051	13	1	.682	7.69
Sheboygan, Wis.	28,907	20	9	.692	45.00
Shelbyville, Ind.	11,201	6	2	.536	33.33
Sioux Falls, S. Dak.	16,887	9		.533	
Somerville, Mass.	88,618	25	6	.282	24.00
South Bend, Ind.	70,967	249	37	3.509	14.86
South Bethlehem, Pa.	24,886	16		.643	
Southbridge, Mass.	14,465	7	1	.484	14.29
Spartanburg, S. C.	21,965	32	8	1.456	25.00
Springfield, Ill.	62,623	42	15	.671	35.71
Springfield, Ohio.	52,296	69	10	1.319	14.49
Stamford, Conn.	31,810	12		.377	
Staunton, Va.	11,823	11	4	.930	36.36
Steelton, Pa.	15,759	3	1	.190	33.33
Steubenville, Ohio.	28,259	19	14	.672	73.68
Stockton, Calif.	36,209	44	6	1.215	13.64
Streator, Ill.	14,313	1		.070	
Superior, Wis.	47,167	16	5	.339	31.25
Tamaqua, Pa.	11,062	1		.090	
Tampa, Fla.	56,251	90	21	1.600	23.33
Taunton, Mass.	36,610	12	1	.328	8.33
Terre Haute, Ind.	67,361	12	9	.178	75.00
Texarkana, Tex.	13,099	3		.229	
Tiffin, Ohio.	12,962	14	1	1.080	7.14
Topeka, Kans.	49,538	61	10	1.231	16.39
Trinidad, Colo.	14,413	7		.486	
Troy, N. Y.	78,004	127	19	1.628	14.96
Tucson, Ariz.	17,424	2		.115	
Tuscaloosa, Ala.	10,824	11		1.016	
Utica, N. Y.	89,272	97	11	1.087	11.34
Vancouver, Wash.	13,805	7		.507	
Virginia, Minn.	15,954	5	1	.313	20.00
Waco, Tex.	34,015	74	8	2.176	10.81
Walla Walla, Wash.	26,067	84	6	3.222	7.14
Waltham, Mass.	31,011	8	1	.258	12.50
Warren, Ohio.	13,308	11	5	.827	45.45
Warren, Pa.	15,083	2		.133	
Washington, Pa.	22,076	35		1.585	
Waterbury, Conn.	89,201	48	2	.538	4.17
Watertown, Mass.	15,188	5		.327	
Watertown, N. Y.	30,404	34	2	1.118	5.88
Waukegan, Ill.	20,917	37	6	1.769	16.22
Wausau, Wis.	19,666	2		.102	
Webster, Mass.	13,484	2		.148	
West Chester, Pa.	13,403	8	6	.597	75.00
Westfield, Mass.	18,769	4		.213	
West Hoboken, N. J.	44,386	2	1	.045	50.00
West New York, N. J.	19,613	5		.255	
West Orange, N. J.	13,964	6		.430	
Wheeling, W. Va.	43,657	200	22	4.581	11.00
White Plains, N. Y.	23,331	5		.214	
Wichita Falls, Tex.	12,749	6	1	.471	16.67
Wichita, Kans.	73,597	97	8	1.318	8.25
Wilkes Barre, Pa.	78,334	20	8	.255	40.00
Wilkinsburg, Pa.	23,899	13	1	.544	7.69
Wilmington, Del.	95,499	150	31	1.571	20.67
Wilmington, N. C.	30,400	39	3	1.283	7.69
Winchester, Mass.	10,812	4	1	.370	25.00
Winona, Minn.	[1]18,583	1	1	.054	100.00
Winston Salem, N. C.	33,136	185	18	5.582	9.73
Winthrop, Mass.	13,105	4		.305	
Woburn, Mass.	16,076	5		.311	
Zanesville, Ohio.	31,320	103	14	3.289	13.59

[1] Population Apr. 15, 1910.

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DEATHS DURING WEEK ENDED APRIL 19, 1919, IN CITIES.

The table following shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended April 19, 1919.

The data are taken from the "Weekly Health Index," April 22, 1919, issued by the Bureau of the Census, Department of Commerce.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended Apr. 19, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding year.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	55	25.5	C. 22.7	11	5.1
Atlanta, Ga.	201,732	46	11.9	C. 25.1	.....	.....
Baltimore, Md.	[2] 669,981	178	13.9	A. 19.6	21	1.6
Birmingham, Ala.	197,670	53	14.0	A. 18.6	.....	.....
Buffalo, N. Y.	473,229	146	16.1	C. 19.5	23	2.5
Cambridge, Mass.	111,432	24	11.2	A. 16.7	.....	.....
Chicago, Ill.	2,596,681	663	13.3	A. 16.8	123	2.5
Cincinnati, Ohio.	418,622	122	15.2	C. 24.6	.....	.....
Cleveland, Ohio.	810,306	243	15.6	C. 17.2	88	5.7
Columbus, Ohio.	225,296	63	14.6	C. 19.2	11	2.5
Dayton, Ohio.	130,655	43	17.2	C. 17.6	12	4.8
Denver, Colo.	.....	63	.....	.....	.....	.....
Fall River, Mass.	128,392	41	16.7	C. 18.7	12	4.9
Grand Rapids, Mich.	135,450	31	12.0	C. 17.3	.....	.....
Indianapolis, Ind.	289,577	88	15.8	C. 21.4	.....	.....
Jersey City, N. J.	318,770	67	11.0	C. 16.0	.....	.....
Kansas City, Mo.	313,785	123	20.4	C. 17.9	32	5.3
Los Angeles, Calif.	588,495	150	13.8	A. 12.8	24	2.2
Louisville, Ky.	242,767	58	12.5	C. 23.4	6	1.3
Lowell, Mass.	109,081	27	12.9	A. 19.1	.....	.....
Memphis, Tenn.	154,759	76	25.6	C. 20.9	7	2.4
Milwaukee, Wis.	453,481	117	13.5	A. 13.7	42	4.8
Minneapolis, Minn.	383,442	105	14.3	C. 19.2	.....	.....
Nashville, Tenn.	119,215	45	19.7	C. 36.3	9	3.9
Newark, N. J.	428,684	125	15.2	C. 19.0	25	3.0
New Haven, Conn.	154,865	37	12.5	C. 21.2	.....	.....
New Orleans, La.	382,273	91	12.4	A. 19.8	.....	.....
New York, N. Y.	5,215,879	1,641	16.4	C. 17.5	350	3.5
Oakland, Calif.	214,206	54	13.1	A. 10.4	.....	.....
Philadelphia, Pa.	1,761,371	578	17.1	[3] 18.3	97	2.9
Pittsburgh, Pa.	593,303	218	19.2	C. 33.8	70	6.2
Portland, Oreg.	.....	61	.....	.....	.....	.....
Providence, R. I.	263,613	69	11.9	C. 20.2	14	2.8
Richmond, Va.	160,719	40	13.0	C. 22.4	6	1.9
Rochester, N. Y.	264,856	71	14.0	C. 15.2	10	2.0
St. Louis, Mo.	779,951	216	14.4	C. 16.0	39	2.6
St. Paul, Minn.	257,669	50	10.1	C. 13.6	.....	.....
San Francisco, Calif.	478,530	156	17.0	C. 20.6	31	3.4
Seattle, Wash.	.....	77	.....	.....	10	.....
Spokane, Wash.	.....	22	.....	.....	.....	.....
Syracuse, N. Y.	161,404	47	15.2	C. 20.0	6	1.9
Toledo, Ohio.	262,234	74	14.7	A. 15.4	.....	.....
Washington, D. C.	401,681	98	12.1	A. 17.9	15	1.9
Worcester, Mass.	173,650	56	16.8	C. 22.5	5	1.5

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED APRIL 26.

CAMP DIX ZONE, N. J.

	Cases.
Diphtheria:	
Pemberton	2
Influenza:	
Chesterfield Township	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chancroid	1
Gonorrhea	21
Measles	12
Pneumonia, lobar	1
Syphilis	3

CAMP FUNSTON ZONE, KANS.

Chicken pox:	
Manhattan	3
Diphtheria:	
Milford	2
Erysipelas:	
Manhattan	1
Mumps:	
Manhattan	9
Scarlet fever:	
Bala	1
Junction City	1
Manhattan	1
Smallpox:	
Wakefield	1

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Gonorrhea:	
Columbus	5
Muscogee County	1
Influenza:	
Columbus	3
Girard	1
Muscogee County	1
Measles:	
Columbus	4
Muscogee County	1
Mumps:	
Columbus	2
Muscogee County	4

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.—continued.

Pellagra:	
Girard	1
Pneumonia:	
Columbus	1
Smallpox:	
Bibb City	3
Columbus	1
Muscogee County	6
Syphilis:	
Bibb City	1
Columbus	2
Whooping cough:	
Columbus	9

CAMP GORDON ZONE, GA.

Atlanta:	
Cerebrospinal meningitis	1
Chancroid	1
Chicken pox	11
Gonorrhea	9
Influenza	4
Measles	6
Pneumonia	1
Scarlet fever	2
Smallpox	40
Syphilis	2
Tuberculosis	2

GULFPORT HEALTH DISTRICT, MISS.

Dysentery, bacillary:	
Moss Point	1
Gonorrhea:	
Gulfport	1
Hookworm:	
Vancleave	1
Influenza:	
Gulfport	2
Malaria:	
De Buys	1
Escatawpa	3
Gulfport	7
Saucier	2
Kiln	3

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GULFPORT HEALTH DISTRICT, MISS.—continued.

Malaria—Continued.	Cases.
Kreole	1
Logtown	1
Mississippi City	1
Moss Point	4
Pascagoula	1
Mumps:	
Biloxi	2
Eastside	1
Gulfport	4
Sandsboro	4
Kreole	1
Mississippi City	2
Pneumonia:	
Biloxi	1
Kiln	1
Wade	1
Pneumonia, broncho:	
Ocean Springs	1
Tuberculosis:	
Biloxi	2
Gautier	1
Whooping cough:	
Biloxi	1
Gulfport	1

CAMP A. A. HUMPHREYS ZONE, VA.

Alexandria:	
Gonorrhea	1
Influenza	2
Mumps	2
Smallpox	1
Syphilis	1
Tonsilitis	11
Typhoid fever	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	8
Mumps	3
Smallpox	1
Tuberculosis	1
Whooping cough	2
Government clinic:	
Chancroid	1
Gonorrhea	13
Syphilis	15

CAMP LEE ZONE, VA.

Chesterfield County:	
Scarlet fever	3
Petersburg:	
Gonorrhea	3
Measles	2
Syphilis	2
Tuberculosis	2

CAMP LEWIS ZONE, WASH.

Measles:	
Steilacoom	5
Lake City	1
Dupont	1
Mumps:	
Spanaway	1

CAMP MERRITT ZONE, N. J.

Closter:	Cases.
Scarlet fever	2
Englewood:	
Chicken pox	5
Influenza	8
Pneumonia	2
Syphilis	1
Haworth:	
Measles	13

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Nitrate Plant No. 2:	
Chancroid	2
Erysipelas	1
Gonorrhea	16
Influenza	5
Mumps	2
Pneumonia	2
Syphilis	5

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	3
Measles	4
Syphilis	2

CAMP PIKE ZONE, ARK.

Little Rock:	
Cerebrospinal meningitis	1
Chicken pox	19
Gonorrhea	11
Influenza	1
Malaria	1
Mumps	7
Pneumonia	4
Scarlatina	2
Scarlet fever	4
Syphilis	5
Tuberculosis	7
North Little Rock:	
Chicken pox	8
Malaria	1
Scarlet fever	3
Syphilis	1

CAMP POLK ZONE, N. C.

Cerebrospinal meningitis:	
Cedar Fork Township	1
Chicken pox:	
Durham	2
Raleigh	4
Diphtheria:	
Raleigh	1
Gonorrhea:	
Cary Township	1
Durham	3
Measles:	
Durham	6
Raleigh	3
Mumps:	
Durham	1
Raleigh	1
Smallpox:	
Raleigh	1

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CAMP POLK ZONE, N. C.—continued.

	Cases.
Tuberculosis:	
Durham	2
Raleigh	1
Typhoid fever:	
Middle Creek Township	1
Whooping cough:	
Cedar Fork Township	3
Durham Township	2
White Oak Township	1

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Chicken pox:	
Portsmouth	1
Norfolk	1
Diphtheria:	
Norfolk	1
Influenza:	
Portsmouth	2
Measles:	
Norfolk	2
Pneumonia:	
Portsmouth	1
Scarlet fever:	
Norfolk	1
Smallpox:	
Norfolk County	7
Tuberculosis:	
Portsmouth	6
Varioloid:	
Norfolk County	2

CAMP SHERIDAN ZONE, ALA.

Government clinic:	
Chancroid	3
Gonorrhea	15
Syphilis	25
Montgomery:	
Gonorrhea	2
Measles	1
Scarlet fever	2
Smallpox	2
Tuberculosis	1

CAMP SHERMAN ZONE, OHIO.

Chillicothe:	
Diphtheria	1
Government clinic:	
Gonorrhea	6
Syphilis	4

SOUTHER FIELD ZONE, GA.

Lethargic encephalitis	1

TIDEWATER HEALTH DISTRICT, VA.

	Cases.
Foxhill:	
Pertussis	5
Government clinic:	
Gonorrhea	19
Syphilis	5
Newport News:	
Chicken pox	5
Gonorrhea	9
Measles	3
Mumps	5
Rubella	1
Scarlet fever	1
Smallpox	1
Syphilis	3
Tuberculosis	3
Phoebus:	
Mumps	1
Tuberculosis	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Cerebrospinal meningitis	1
Chicken pox	4
Diphtheria	3
Gonorrhea	12
Influenza	1
Measles	3
Syphilis	9
Tuberculosis	2
Typhoid fever	1

CAMP UPTON ZONE, N. Y.

Brook Haven:	
Measles	2
Septic sore throat	4
Syphilis	2
Patchogue:	
Pneumonia	1
Riverhead:	
Chicken pox	2
German measles	2
Pneumonia	1
Tuberculosis	2

WILMINGTON SANITARY DISTRICT, N. C.

Wilmington:	
Chicken pox	1
Gonorrhea	2
Mumps	2
Smallpox	1
Tuberculosis	3
Typhoid fever	2

Better safe now than sorry later—BUY VICTORY LIBERTY BONDS.

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DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended April 18, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	547.00	634.34
All troops in United States	872.35	1,108.51
American Expeditionary Forces	436.18	471.94
Annual admission rate per 1,000 (disease only)	470.08	564.08
All troops in United States	736.93	938.41
American Expeditionary Forces	380.39	435.88
Noneffective per 1,000 on day of report	44.75	47.13
All troops in United States [1]	53.99	57.48
American Expeditionary Forces	41.61	43.59
Annual death rate per 1,000 (all causes)	6.17	6.94
All troops in United States [1]	7.22	9.36
American Expeditionary Forces	5.81	6.11
Annual death rate per 1,000 (disease only)	4.48	4.63
All troops in United States [1]	6.16	8.57
American Expeditionary Forces	3.91	3.67

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

Cases of special diseases reported during the week ended Apr. 18, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
Bowie	7			28	12					4,810.45	178.48
Bragg										383.76	17.52
Custer	2		1	10	7					796.02	50.93
Devens	30			18		129			1	604.56	34.66
Dix	4		1	11	4				2	391.07	100.38
Dodge				10	2				1	948.93	135.74
Eustis											
Fremont											5.43
Funston				5		1			2	514.37	55.50
Gordon	1			17		3				1,978.06	79.41
Grant	3			36	3		2		5	1,471.05	82.61
Humphreys				3		1				627.34	36.52
Jackson	3		3	14		2	2			1,240.00	67.30
Kearny	1			4	2		3			2,661.87	149.41
Henry Knox	5			5						194.43	6.61
Lee	4			11	6					1,182.22	99.32
Lewis			1	4					1	1,926.27	126.16
Meade	2			55	1					707.51	79.73
Pike	3		1	16	4					1,623.64	135.08
Shelby			1	11	11					2,324.80	84.02
Sherman	2			23	14	8			3	1,048.55	88.94
Taylor	2			16	10	5	1			581.25	132.24
Travis		1	3	5	5	1				1,167.22	88.98
Upton	5			19		3				667.24	46.67
Las Casas											
Northeastern Department					1					588.01	24.75
Eastern Department	3			13	1	1			2	483.22	18.79
Southeastern Department				16						493.50	23.95
Central Department				25			1		8	646.95	24.47
Southern Department	12		2	46	7	7	1			727.18	56.56

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DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES—Continued.

Cases of special diseases reported during the week ended Apr. 18, 1919—Continued.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
Western Department				10	4	4	1		2	562.55	23.00
Aviation camps	2					3				573.53	26.45
Port of embarkation:											
Hoboken	6			13	2	26	4	2		587.21	7.38
Newport News	2		1	35	7	10				914.34	65.30
Fort Monroe				2		2	1			648.06	1.13
Alcatraz Disciplinary Barracks				1						857.05	2.42
Leavenworth Disciplinary Barracks										1,068.91	17.71
Columbus Barracks				3	2				1	627.56	2.68
Jefferson Barracks	2			9	1					1,759.14	11.42
Fort Logan				2	2					2,338.21	6.67
Fort McDowell	1			2						834.22	4.00
Fort Sill				14	14	1				515.22	2.68
Fort Slocum										644.18	26.15
Fort Thomas				1	1					918.32	24.23
West Point			1							64.78	1.26
Arsenals				13						581.56	21.75
Miscellaneous small stations				19						486.18	29.26
Total	102	1	15	555	123	207	16	2	28	736.98	33.00

Number of deaths and annual rates per 1,000 at large camps in United States, week ended Apr. 18, 1919.

Camp.	Strength.	Deaths. All causes.	Deaths. Disease only.	Annual death rate per 1,000. All causes.	Annual death rate per 1,000. Disease only.
Bowie	3,977				
Bragg	1,604				
Custer	5,222				
Devens	29,474	4	4	7.30	7.30
Dix	12,109	1	1	4.29	4.29
Dodge	7,817				
Fremont	184				
Funston	5,479	1	1	9.52	9.52
Gordon	7,262				
Grant	10,548				
Humphreys	2,424				
Jackson	10,457	1	1	5.09	5.09
Kearny	614				
Henry Knox	15,457				
Lee	8,760	1	1	5.97	5.97
Lewis	5,568				
Meade	18,756				
Pike	7,961	3	3	20.04	20.04
Shelby	5,731				
Sherman	17,917	2	2	61.14	61.14
Taylor	11,567	1	1	4.67	4.67
Travis	5,149				
Upton	18,470				
Northeastern Department	9,572	1	1	13.49	13.49
Eastern Department	19,572				
Southeastern Department	8,871	1		5.87	
Central Department	4,986				
Southern Department	31,774	2	1	3.27	1.63
Western Department	10,560	1		49.91	
Aviation camps	19,409	1		2.66	
Port of embarkation:					
Hoboken	34,601	6	5	8.94	7.45
Newport News	15,774	7	6	23.79	20.39
All others	94,098	25	24	13.88	13.39
Total	438,909	61	52	7.22	6.15

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DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES—Continued.

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	12.08	10.49	11.70	12.26
Dysentery	.11	.11	.44	.73
Malaria	1.77	.79	.20	.19
Venereal	65.75	68.62	38.39	66.29
Paratyphoid	.....	.....	.04	4.37
Typhoid	.....	.11	.18	.69
Measles	1.89	2.71	2.22	1.97
Meningitis	.23	.22	1.61	.61
Scarlet fever	3.31	3.72	.48	.85
Influenza	24.64	27.54	.....	.....

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended April 26, 1919.

Arkansas.—State totals: Malaria 44, measles 36, influenza 29, smallpox 24, chicken pox 11, tuberculosis 10, whooping cough 8, pellagra 4, diphtheria 1, scarlet fever 1, trachoma 1.

California.—Influenza: Cases reported 535. Smallpox: Thirty-five cases, of which in Oakland 5, San Francisco 4, Long Beach 3, Chico 4, Dinuba 16, Tulare County 2, Orange County 1. Typhoid fever: Three cases, of which in Stockton 2, Fresno County 1. One case cerebrospinal meningitis in Oakland. One case lethargic encephalitis in Tulare County.

Connecticut.—Cerebrospinal meningitis: Bridgeport 1, Hartford 2. Influenza: State total 34.

Florida.—State totals: Typhoid fever 9, malaria 24, smallpox 1, measles 16, scarlet fever 1, dysentery 5. One case acute poliomyelitis in Polk County.

Georgia.—State totals: Conjunctivitis (acute infectious) 1, hookworm 4, chicken pox 30, diphtheria 3, dysentery (amebic) 6, dysentery (bacillary) 8, German measles 1, gonorrhea 76, influenza 27, malaria 49, measles 24, mumps 19, pneumonia (acute lobar) 25, scarlet fever 8, septic sore throat 10, smallpox 63, syphilis 56, tuberculosis (pulmonary) 11, tuberculosis (other than pulmonary) 2, typhoid fever 8, whooping cough 8.

Illinois.—Diphtheria: Cases reported 118, of which in Chicago 79, Elgin 6, Lagrange 3. Scarlet fever: One hundred and thirty cases, of which in Chicago 68, Baldwin 11, Rockford 8, Jacksonville 9, Dixon 5, Stockton 4. Smallpox: Ninety-one cases, of which in Dubois 22, Amboy Township (Lee County) 11, Galesburg 8, Danville 4, Lee Center Township (Lee County) 4, Philo 4, Champaign 3, Aurora 3, York Township (Dupage County) 3. Meningitis: Chicago 2, Monroe

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Township (Ogle County) 1. Lethargic encephalitis: Ramsey 1. Influenza: Sixty-nine cases, of which in Chicago 53, with no recrudescence noted. Gonorrhea 246, syphilis 102.

Indiana.—Scarlet fever reported in South Bend, Wabash, Mishawaka, Portland, Logansport, Anderson, and Winamac. Measles are reported in Elkhart. Smallpox reported in Tipton, Elkhart, Connersville, Anderson, Columbia City, and Clinton. Typhoid fever reported in Princeton. Diphtheria reported in White, Benton, and Henry Counties. Rabies reported in Bicknell, Carlisle, Farmersburg, Crandall, and Terre Haute. Syphilis 42, gonorrhea 37, chancroid 3.

Iowa.—Chancroid: Sioux City 2. Diphtheria: Davenport 1, Des Moines 3, Dubuque 1, Edgewood 1, Fort Des Moines 1, Ottumwa 1. Gonorrhea: Cedar Rapids 5, Council Bluffs 7, Davenport 9, Dubuque 2, Sioux City 58. Mumps: Fort Des Moines 2, Northwood 10. Scarlet fever: Burlington 5, Cedar Rapids 4, Davenport 1, Des Moines 23, Fort Des Moines 1, Greenfield 2, Leland 1, Vinton 1, Walker 2. Smallpox: Albia 6, Boone 3, Cedar Rapids 8, Davenport 10, David City 1, Fort Dodge 5, Ottumwa 1, Shelby 1. Syphilis: Council Bluffs 3, Davenport 5, Sioux City 10. In the rural districts of the following counties: Diphtheria: Butler 1, Chickasaw 1. Measles: Des Moines 3. Scarlet fever: Appanoose 1, Butler 1, Clinton 2, Des Moines 4, Guthrie 5, Winneshiek 4. Smallpox: Buchanan 2, Calhoun 1, Cherokee 4, Grundy 2, Mills 1.

Kansas.—Meningitis in cities: Baldwin 1, Conway Springs 1. State totals: Typhoid fever 6, smallpox 77, diphtheria 30, scarlet fever 58, influenza 335.

Louisiana.—Lethargic encephalitis 1, influenza 7, anthrax 1, typhoid fever 17, smallpox 24, diphtheria 12, meningitis 2, gonorrhea 66, syphilis 25, chancroid 15.

Maine.—Chancroid: Portland 1, Searsport 1. Chicken pox: Bath 1, Portland 2. Diphtheria: Westbrook 3, Kennebunk 2, Millenocket 2, Enfield 1, Van Buren 1, Auburn 1, Passadumkeag 1, Lewiston 1. Gonorrhea: Belfast 2, Camden 2, Portland 17, Lewiston 4, Biddeford 1, Auburn 1, Bath 1, Fort Fairfield 1, Skowhegan 1, Waterville 1, Sanford 1, Searsport 1. Mumps: Portland 1. Scarlet fever: Portland 10, Bangor 1, Westbrook 1, Wiscasset 1, Waldoboro 1. Smallpox: Bath 1, Van Buren 9, New Gloucester 1, Auburn 1, Fort Kent 2. Syphilis: Lewiston 3, Portland 3, Bangor 5, Belfast 1, Mars Hill 1, Searsport 1, Stockton 1. Tuberculosis: Paris 1, Hallowell 1, Westbrook 1, North Yarmouth 1, Thomaston 1, Waterville 1, Auburn 1, Biddeford 1, Caribou 1, Rockland 1, Portland 1, Norway 1. Typhoid fever: Guilford 1, Camden 1. Influenza: Portland 2, Biddeford 1.

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Massachusetts.—Unusual prevalence of measles, the following cities reporting: Fall River 68, Taunton 24, Lynn 38, Worcester 56.

Minnesota.—Smallpox (new foci): Cloquet 1, Stillwater 1. Syphilis 61, gonorrhea 88, chancroid 4.

New Jersey.—Cases reported: Influenza 288, pneumonia 144. Unusual prevalence of scarlet fever in Washington township (Mercer County). Smallpox reported from Hamilton Township (Atlantic County), Camden (Camden County), Upper Township (Cape May County), and Hoboken (Hudson County).

New York.—Reported in State outside of New York City. Typhoid fever 10, measles 346, scarlet fever 140, whooping cough 51, diphtheria 167, smallpox 14, of which in North Collins 12, Buffalo 1, and Schenevus 1. Cerebrospinal meningitis 3, of which in Buffalo 1, Lackawanna 1, and Hempstead 1. Pneumonia 146. Voluntary reports: Syphilis 200, gonorrhea 36.

North Carolina.—State totals: Whooping cough 60, measles 294, diphtheria 16, scarlet fever 10, septic sore throat 5, smallpox 79, chicken pox 52, infantile paralysis 3, typhoid fever 11, epidemic meningitis 1, broncho-pneumonia 18, lobar pneumonia 12, ophthalmia neonatorum 2, dysentery (bacillary) 1, paratyphoid fever 1, cholera infantum 1, gonorrhea 162, syphilis 50, chancroid 8, gonorrhea and chancroid 1, gonorrhea and syphilis 4, syphilis and chancroid 1, influenza (new cases) in Cleveland County 115.

Ohio.—No undue prevalence. Influenza negligible. Lethargic encephalitis: Toledo 1, Eaton 1.

Oregon.—Influenza: Portland reports 22 cases and 5 deaths. Clackamas 18 cases, Linn 1, and Tillamook 24.

Vermont.—No outbreak or unusual prevalence.

Virginia.—Smallpox by counties: Alexandria 10, Norfolk 2, Tazewell 1, Middlesex 2, Fairfax 2. Influenza: 2 cases reported.

Washington.—Unusual prevalence contagious diseases. Scarlet fever: Seattle 19, Ellensburg 4, Spokane 7, King County 5. Smallpox: Mild form generally prevalent throughout the State.

There is one good, safe investment—VICTORY BONDS.

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Ottertail County.		
Pokegama Sanatorium, Pine County.	Linn Grove, Buena Vista County, Iowa; Lake Preston, Kingsbury County, S. Dak.	torium to home in Montana 1 open case and 1 arrested case left sanatorium for homes.
City and County Hospital, St. Paul, Ramsey County.	Butte, Silver Bow County, Mont.....	Fatal case removed from hospital to home in Montana.

ANTHRAX.

Atlanta, Ga., and Philadelphia, Pa.

There were reported during the week ended April 12, 1919, one case of anthrax at Atlanta, Ga., and three cases at Philadelphia, Pa.

CEREBROSPINAL MENINGITIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 26, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga.....	1	Camp Polk zone, N. C.....	1
Camp Pike zone, Ark.....	1	Camp Travis zone, Tex.....	1

State Reports for March, 1919.

Place.	New cases reported.	Place.	New cases reported.
Connecticut:		Iowa:	
Hartford County—		Bremer County.....	1
Southington.....	3	Chickasaw County.....	1
Litchfield County—		Jasper County.....	1
Kent.....	1	Jones County.....	1
New Haven County—		Polk County.....	1
New Haven.....	2	Total.....	5
Waterbury.....	1		
Total.....	7	Minnesota:	
		Becker County—	
Florida:		Burlington Township.....	1
Miami.....	1	Lake County—	
Jacksonville.....	3	Two Harbors.....	1
		Roseau County—	
Total.....	4	Stokes Township.....	1
		Total.....	3

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yahoga County	1
anklin County	1
milton County	1
honing County	1
dina County	1
nroe County	1
ntgomery County	7
ckaway County	1
rtage County	1
ioto County	1
mmit County	2
n Wert County	1
ayne County	1
Total	23

Sumter County	1
Total	4
Washington:	
Clarke County	1
Ferry County	1
King County—	
Seattle	2
Pierce County—	
Tacoma	1
Total	5

City Reports for Week Ended Apr. 12, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
n, Ohio	1	.....	New York, N. Y	14	.....
on, Mass	5	2	Paterson, N. J	1	.....
go, Ill	3	1	Philadelphia, Pa	2	.....
eland, Ohio	2	1	Pittsburgh, Pa	1	.....
oit, Mich	.....	1	Portland, Oreg	1	.....
Worth, Tex	.....	1	Portsmouth, Va	.....	1
Angeles, Calif	.....	1	Providence, R. I	1	.....
sville, Ky	1	3	Roanoke, Va	.....	1
on, Ga	.....	1	St. Louis, Mo	2	1
vaukee, Wis	1	1	Somerville, Mass	1	1
ark, N. J	4	.....	Wilmington, Del	1	.....
Haven, Conn	1	.....	Worcester, Mass	1	1

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 26, 1919.

	Cases.		Cases.
etteville sanitary district, N. C	1	Muscle Shoals sanitary district, Ala	2
p Gordon zone, Ga	1	Camp Sheridan zone, Ala	3
p Jackson zone, S. C	1		

Had we not won victory, how much would you pay to get it?

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pi:	
ns County	17
rn County	16
e County	37
a County	55
on County	14
ar County	322
oun County	23
ll County	43
asaw County	21
taw County	19
orne County	22
e County	31
County	12
oma County	212
ah County	20
ngton County	66
oto	22
st County	45
klin County	43
ge County	11
ne County	10
ada County	25
cock County	34
rison County	21
ds County	203
nes County	132
nphreys County	82
quena County	31
ramba County	21
tson County	42
er County	95
erson County	54
erson Davis County	14
es County	61
nper County	15
ayette County	44
nar County	17
derdale County	21
vrence County	58
County	72
Pearl River County	64
Perry County	57
Pike County	24
Pontotoc County	58
Prentiss County	57
Rankin County	41
Scott County	16
Sharkey County	58
Simpson County	20
Smith County	28
Stone County	23
Sunflower County	310
Tallahatchie County	66
Tate County	77
Tippah County	43
Tishomingo County	23
Tunica County	132
Union County	5
Walthall County	12
Warren County	190
Washington County	108
Wayne County	8
Webster County	6
Wilkinson County	23
Winston County	79
Yalobusha County	42
Yazoo County	164
Total	4,358
Ohio:	
Ashland County	5
Hocking County	1
Licking County	1
Total	7
South Carolina:	
Chester County	8
Marion County	8
Total	16

City Reports for Week Ended Apr. 12, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
, Ill		1	Paterson, N. J.	1	
Mo.	1		Pine Bluff, Ark.	2	
Rock, Ark.	1		Trenton, N. J.	1	

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Mississippi:	
Adams County	3
Alcorn County	3
Amite County	6
Benton County	1
Bolivar County	32
Calhoun County	1
Carroll County	1
Chickasaw County	3
Clarke County	5
Clay County	4
Coahoma County	15
Copiah County	7
De Soto County	4
Forest County	12
Franklin County	2
George County	2
Harrison County	1
Hinds County	50
Holmes County	11
Itawamba County	5
Jasper County	1
Jefferson Davis County	2
Jones County	13
Lamar County	1
Lauderdale County	1
Lawrence County	12
Lee County	2
Leflore County	3
Lincoln County	8
Lowndes County	1
Oktibbeha County	2
Pearl River County	2
Perry County	2
Pike County	3
Pontotoc County	2
Prentiss County	2
Scott County	2
Sharkey County	6
Simpson County	2
Stone County	1
Sunflower County	24
Tallahatchie County	6
Tate County	4
Tippah County	4
Tishomingo County	3
Tunica County	12
Walthall County	1
Warren County	7
Washington County	11
Wayne County	3
Winston County	1
Yazoo County	10
Total	349
South Carolina:	
Chester County	1
Marion County	1
Spartanburg County	2
Total	4

City Reports for Week Ended Apr. 12, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Anniston, Ala	1	.....	Montgomery, Ala	.....	1
Atlanta, Ga	.....	1	Nashville, Tenn	1	.....
Charleston, S. C	.....	2	Pine Bluff, Ark	1	.....
Houston, Tex	.....	1	Portsmouth, Va	.....	1
Kalamazoo, Mich	1	1	Springfield, Mo	.....	1
Memphis, Tenn	2	.....	Taunton, Mass	.....	1

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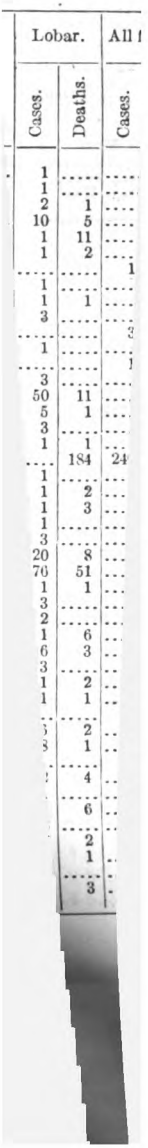

Lobar.		All f
Cases.	Deaths.	Cases.
1	.....	.....
1	.....	.....
2	1	.....
10	5	.....
1	11	.....
1	2	.....
.....	.....	1
1	.....	.....
1	1	.....
3	.....	.....
.....	.....	2
1	.....	.....
.....	.....	1
3	.....	.....
50	11	.....
5	1	.....
3	.....	.....
1	1	.....
.....	184	24
1	.....	.....
1	2	.....
1	3	.....
1	.....	.....
3	.....	.....
20	8	.....
76	51	.....
1	1	.....
3	.....	.....
2	.....	.....
1	6	.....
6	3	.....
3	.....	.....
1	2	.....
1	1	.....
.....	.....	.....
3	2	.....
3	1	.....
.....	.....	.....
2	4	.....
.....	.....	.....
.....	6	.....
.....	.....	.....
.....	2	.....
.....	1	.....
.....	.....	.....
.....	3	.....

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Fergus Falls	1
Total	2
Mississippi:	
Itawamba County	1
Penns:	
Allegheny County	
Blair County	
Lawrence County	1
Total	4

City Reports for Week Ended Apr. 12, 1919.

Place.	Cases.	Death.	Place.	Cases.	Deaths.
Boston, Mass	1	1	Lincoln, Nebr		1
Chicago, Ill	1		New York, N. Y		1
Houston, Tex	1		Wilmington, Del		1
Lawrence, Mass	1				

RABIES IN ANIMALS.

Kansas City, Mo., and San Antonio, Tex.

During the week ended April 12, 1919, two cases of rabies in animals were reported at Kansas City, Mo., and two cases at San Antonio, Tex.

RABIES IN MAN.

State Reports for March, 1919.

During March two cases of rabies were reported in Mississippi and one case in Ohio.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 26, 1919.

	Cases.		Cases.
Camp Funston zone, Kans	3	Portsmouth and Norfolk County health district, Va	1
Camp Gordon zone, Ga	5	Camp Sheridan zone, Ala	2
Camp Lee zone, Va	3	Tidewater health district, Va	1
Camp Merritt zone, N. J	2		
Camp Pike zone, Ark	7		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 975.

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SMALLPOX.

District of Columbia.

Unusual prevalence of smallpox has been reported in the District of Columbia. Forty-six cases were notified during the three weeks ended April 26, 1919.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 26, 1919.

	Cases.
Camp Funston zone, Kans.	1
Gas and flame school zone, Ga. and Ala.	12
Camp Gordon zone, Ga.	40
Camp A. A. Humphreys zone, Va.	1
Camp Jackson zone, S. C.	1
Camp Polk zone, N. C.	1
Portsmouth and Norfolk County health district, Va.	7
Camp Sheridan zone, Ala.	2
Tidewater health district, Va.	1
Wilmington sanitary district, N. C.	1

State Reports for March, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Arizona:						
Maricopa County	7			1	6	
Apache County	1				1	
Gila County	1			1		
Yavapai County	1				1	
Total	10			2	8	
Florida:						
Gadsden County	2		2			
Hillsborough County—						
Tampa	1				1	
Levy County	2				2	
Walton County	2				2	
Total	7		2		5	
Michigan:						
Alger County—						
Burt Township	2		2			
Antrim County—						
Central Lake Township	1					1
Berrien County—						
Niles	1				1	
Cass County—						
Mason Township	6				6	
Charlevoix County—						
Evangeline Township	7				7	
Clinton County—						
St. Johns	2				2	
Eaton County—						
Grand Ledge	1				1	
Genesee County—						
Flushing Township	1				1	
Flint	2				2	
Houghton County—						
Adams Township	1				1	
South Range	13				13	
Ingham County—						
Leslie	2				2	
East Lansing	1				1	
Lansing	53				53	
Ionia County—						
Ionia	1				1	
Jackson County—						
Blackman Township	5				5	
Jackson	5				5	

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SMALLPOX—Continued.

State Reports for March, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain
Michigan—Continued.						
Kalamazoo County—						
Alamo Township	3				3	
Oshtemo Township	5				5	
Kalamazoo	30				30	
Keweenaw County—						
Allouez Township	4				4	
Ahmeek	6				6	
Kent County						
Grand Rapids	6					6
Lenawee County						
Fairfield Township	2				2	
Blissfield	5				5	
Mason County						
Ludington	1				1	
Menominee County—						
Menominee	8				6	2
Midland County						
Jerome Township	3				3	
Lincoln Township	2				2	
Coleman	2				2	
Monroe County						
Monroe	4				4	
Montcalm County						
Fairplains Township	3				3	
Oakland County						
Orion	1				1	
Ogemaw County—						
West Branch Township	1				1	
Saginaw County						
Saginaw	2					2
St. Clair County						
Cotteryille Township	2				2	
Marine City	1					1
Washtenaw County						
Ann Arbor	2				2	
Wayne County						
Detroit	10				3	7
Total	207		2		186	19
Minnesota:						
Becker County						
Lake Park Township	1				1	
Big Stone County						
Ortonville	3				3	
Brown County						
Sleepy Eye	1				1	
Carlton County						
Atkinson Township	1				1	
Cass County						
Pine River	4				4	
Clay County						
Moorhead	1				1	
Clearwater County—						
Bagley	6				6	
Copley Township	7				7	
Shevlin Township	1				1	
Crow Wing County						
Brainerd	2		1		1	
Dodge County						
Wasioja Township	1				1	
Goodhue County						
Red Wing	15				15	
Hennepin County—						
Minneapolis	33			8	25	
Houston County—						
Spring Grove	5			1	3	1
Black Hammer Township	1				1	
Spring Grove Township	1				1	

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SMALLPOX—Continued.

State Reports for March, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Minnesota—Continued.						
Kanabec County—						
Comfort Township	1				1	
Peace Township	3				3	
Pomroy Township	1				1	
Koochiching County—						
International Falls	1		1			
Lake County—						
Two Harbors	1				1	
Le Seuer County—						
Tyrone Township	1				1	
Olmsted County—						
Rochester	2				2	
Otter Tail County—						
Fergus Falls	1				1	
Pine County—						
Pokegama	1				1	
Polk County—						
Angus Township	1				1	
Ramsey County—						
St. Paul	94				94	
Rock County—						
Luverne	1				1	
St. Louis County—						
Duluth	11		1		10	
Scott County—						
Shakopee	8				8	
Jackson Township	1				1	
Stearns County—						
St. Cloud	2				2	
Todd County—						
Staples	4				4	
Traverse County—						
Wheaton	2				2	
Wabasha County—						
Lake City	3				3	
Wilkin County—						
Campbell	1				1	
Winona County—						
Rollingstone Township	1					1
Total	224		3	9	210	2
Ohio:						
Ashland County	4					4
Brown County	4				1	3
Butler County	88		1	2	47	38
Champaign County	9			1	6	2
Clark County	1					1
Columbiana County	1					1
Coshocton County	16				6	10
Cuyahoga County	25			2	3	20
Darke County	1					1
Delaware County	1					1
Fayette County	7				7	
Franklin County	6				4	2
Fulton County	6				4	2
Guernsey County	2					2
Hamilton County	31		1	4	5	21
Harrison County	1					1
Highland County	17			1	5	11
Huron County	1					1
Jefferson County	13				11	2
Knox County	4				4	
Lorain County	30			2	14	14
Lucas County	25				20	5
Mahoning County	40			1	11	28
Miami County	28			1	26	1
Montgomery County	31				29	2
Muskingum County	22				1	21
Paulding County	1					1
Perry County	1				1	

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SMALLPOX—Continued.

State Reports for March, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Ohio—Continued.						
Pike County	15				14	1
Preble County	2			1		1
Richland County	4				1	3
Sandusky County	1				1	
Scioto County	32				22	8
Seneca County	3				3	
Stark County	5				1	4
Summit County	7					7
Trumbull County	10					10
Tuscarawas County	60		2	2	39	17
Union County	8			2	1	5
Warren County	34			4	30	
Wayne County	1					1
Total	598		4	23	317	254

State Reports for March, 1919.

Place.	Cases.	Deaths.
Connecticut:		
New London County—		
New London	1	
Iowa:		
Adair County	1	
Allamakee County	1	
Boone County	9	
Buchanan County	8	
Butler County	4	
Carroll County	5	
Cerro Gordo County	3	
Cherokee County	1	
Clayton County	1	
Crawford County	1	
Des Moines County	3	
Dubuque County	3	
Fremont County	1	
Grundy County	2	
Jasper County	2	
Johnson County	1	
Jones County	1	
Linn County	37	
Lyon County	1	
Mills County	3	
Monona County	4	
Montgomery County	1	
Polk County	15	
Pottawattamie County	13	
Scott County	62	
Van Buren County	2	
Wapello County	15	
Webster County	11	
Total	211	
Mississippi:		
Alcorn County	1	
Attala County	1	
Bolivar County	25	
Carroll County	4	
Chickasaw County	11	
Choctaw County	4	
Claiborne County	5	
Clarke County	15	

Place.	Cases.	Deaths.
Mississippi—Continued.		
Clay County	4	
Coahoma County	3	
Grenada County	5	
Hinds County	2	
Holmes County	9	
Humphreys County	10	
Jones County	2	
Lafayette County	1	
Lauderdale County	3	
Lawrence County	2	
Leake County	2	
Leflore County	31	
Lowndes County	1	
Monroe County	2	
Oktibbeha County	13	
Panola County	3	
Pearl River County	7	
Prentiss County	21	
Scott County	3	
Sharkey County	2	
Sunflower County	53	
Tallahatchie County	19	
Tate County	2	
Tippah County	27	
Tunica County	1	
Warren County	2	
Washington County	3	
Yalobusha County	9	
Yazoo County	7	
Total	314	
North Carolina:		
Alamance County	5	
Ashe County	2	
Beaufort County	7	
Bertie County	9	
Cabarrus County	37	
Caswell County	19	
Chatham County	3	
Cherokee County	9	
Chowan County	1	
Cumberland County	6	
Currituck County	1	

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SMALLPOX—Continued.

State Reports for March, 1919—Continued.

Place.	Cases.	Deaths.
North Carolina—Continued.		
Dare County	4	.....
Durham County	8	.....
Forsyth County	104	.....
Gaston County	8	.....
Guilford County	34	.....
Halifax County	1	.....
Harnett County	3	.....
Hertford County	2	.....
Iredell County	1	.....
Lenoir County	8	.....
Lincoln County	1	.....
Montgomery County	4	.....
Moore County	11	.....
Nash County	1	.....
Pasquotank County	4	.....
Perquimans County	8	.....
Pitt County	9	.....
Randolph County	7	.....
Rockingham County	15	.....
Rowan County	5	.....
Sampson County	1	.....
Stanly County	4	.....
Wake County	3	.....
Washington County	10	.....
Watauga County	1	.....
Wilkes County	3	.....
Yadkin County	1	.....
Total	252	.....
North Dakota:		
Cass County	2	.....
Grand Forks County	1	.....
Mountrail County	22	.....
Ramsey County	1	.....
Sargeant County	11	.....
Ward County	1	.....
Total	38	.....
Pennsylvania:		
Allegheny County	4	.....
Clearfield County	1	.....
Elk County	5	.....
Jefferson County	1	.....
Lackawanna County	29	.....
Philadelphia County	2	.....
Wayne County	6	.....
Total	48	.....
South Carolina:		
Chesterfield County	1	.....
Florence County	2	.....
Greenville County	8	.....
Greenwood County	4	.....
Spartanburg County	1	.....
Total	16	.....

Place.	Cases.	Deaths.
Washington:		
Asotin County—		
Clarkston	3	.....
Chelan County	1	.....
Wenatchee	1	.....
Clallam County—		
Port Angeles	1	.....
Clarke County—		
Camas	2	.....
Columbia County—		
Starbuck	1	.....
Cowlitz County—		
Castle Rock	1	.....
Garfield County	2	.....
Grays Harbor County—		
Hoquiam	14	.....
Montesano	1	.....
King County	2	.....
Renton	2	.....
Seattle	72	.....
Kittitas County	1	.....
Ellensburg	2	.....
Lewis County	15	.....
Centralia	3	.....
Toledo	1	.....
Mason County	6	.....
Okanogan County—		
Brewster	7	.....
Pierce County	37	.....
Eatonville	1	.....
Puyallup	8	.....
Tacoma	41	.....
Skagit County—		
Hamilton	4	.....
Sedro Woolley	1	.....
Snohomish County	1	.....
Everett	4	.....
Spokane County—		
Spokane	11	.....
Hillyard	1	.....
Thurston County	9	.....
Walla Walla County	1	.....
Walla Walla	5	.....
Yakima County	71	.....
Granger	1	.....
Toppenish	4	.....
Yakima	58	.....
Total	396	.....
Wyoming:		
Sweetwater County	3	.....
Washakie County	6	.....
Sheridan County	12	.....
Laramie County	9	.....
Campbell County	3	.....
Lincoln County	10	.....
Albany County	1	.....
Crook County	1	.....
Natrona County	6	.....
Total	51	.....

City Reports for Week Ended Apr. 12, 1919.

Place.	Cases.	Deaths.
Abilene, Tex	10	.....
Ann Arbor, Mich	2	.....
Atchison, Kans	19	.....
Atlanta, Ga	48	1
Austin, Tex	2	.....
Beatrice, Nebr	2	.....
Bedford, Ind	4	.....
Beloit, Wis	1	.....
Billings, Mont	4	.....

Place.	Cases.	Deaths.
Boston, Mass	1	.....
Buffalo, N. Y	1	.....
Cape Girardeau, Mo	2	.....
Carbondale, Pa	1	.....
Cedar Rapids, Iowa	7	.....
Chanute, Kans	21	.....
Charlotte, N. C	2	.....
Chicago, Ill	2	.....
Cincinnati, Ohio	8	.....

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SMALLPOX—Continued.

City Reports for Week Ended Apr. 12, 1919—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Charleston, W. Va.	1		New York, N. Y.	2	
Columbus, Ohio	2		Norfolk, Va.	4	
Council Bluffs, Iowa	2		Oklahoma City, Okla.	16	
Dallas, Tex.	19		Omaha, Nebr.	20	
Danville, Ill.	6		Oshkosh, Wis.	2	
Davenport, Iowa	18		Palestine, Tex.	1	1
Denver, Colo.	11		Parkersburg, W. Va.	1	
Des Moines, Iowa	6		Parsons, Kans.	1	
Detroit, Mich.	14		Pekin, Ill.	4	
Duluth, Minn.	2		Peoria, Ill.	9	
El Paso, Tex.	1		Pine Bluff, Ark.	1	
Eureka, Calif.	1		Piqua, Ohio	1	
Fargo, N. Dak.	1		Pittsburgh, Pa.	1	
Fort Wayne, Ind.	8		Pomona, Calif.	1	
Galesburg, Ill.	1		Portland, Oreg.	23	
Hammond, Ind.	1		Pueblo, Colo.	1	
Hoquiam, Wash.	2		Racine, Wis.	7	
Independence, Mo.	2		Red Wing, Minn.	15	
Indianapolis, Ind.	1		Reno, Nev.	2	
Joplin, Mo.	1		Roanoke, Va.	4	
Kalamazoo, Mich.	2		Rockford, Ill.	2	
Kansas City, Kans.	1		Rock Island, Ill.	2	
Kansas City, Mo.	12		Saginaw, Mich.	1	
Kokomo, Ind.	1		St. Cloud, Minn.	3	
La Fayette, Ind.	1		St. Joseph, Mo.	10	
Laurel, Miss.	2		St. Louis, Mo.	3	
Lincoln, Nebr.	25		St. Paul, Minn.	6	
Little Rock, Ark.	2		Salt Lake City, Utah	12	
Long Beach, Calif.	2		San Antonio, Tex.	3	
Los Angeles, Calif.	3		San Diego, Calif.	1	
Macon, Ga.	1		San Jose, Calif.	1	
Madison, Wis.	2		Scranton, Pa.	1	
Marshalltown, Iowa	3		Seattle, Wash.	22	
Memphis, Tenn.	4		Sioux City, Iowa	1	
Middletown, Ohio	2		Steubenville, Ohio	2	
Milwaukee, Wis.	2		Superior, Wis.	2	
Minneapolis, Minn.	11		Tacoma, Wash.	7	
Missoula, Mont.	1		Walla Walla, Wash.	4	
Mobile, Ala.	6		Washington, D. C.	16	
Moline, Ill.	1		Wheeling, W. Va.	1	
Montgomery, Ala.	1		Wichita, Kans.	2	
Muscatine, Iowa	1		Winston-Salem, N. C.	15	
Nashville, Tenn.	3		Youngstown, Ohio	3	
New Orleans, La.	15				

SYPHILIS.

Cases Reported in Rural-Cantonment Zones, Week Ended Apr. 26, 1919.

	Cases.		Cases.
[illegible]	3	[illegible]	1
[illegible]	3	[illegible]	4
[illegible]	2	[illegible]	2
[illegible]	[illegible]	[illegible]	4
[illegible]	2	[illegible]	1
[illegible]	2	[illegible]	1
[illegible]	1	[illegible]	1
[illegible]	2		

PLAGUE.

City Reports for Week Ended Apr. 12, 1919.

[illegible]

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TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 26, 1919.

	Cases.
Camp Gordon zone, Ga.	2
Gulfport health district, Miss.	3
Camp Jackson zone, S. C.	1
Camp Lee zone, Va.	2
Camp Pike zone, Ark.	7
Camp Polk zone, N. C.	3
Portsmouth and Norfolk County health district, Va.	6
Camp Sheridan zone, Ala.	1
Tidewater health district, Va.	3
Camp Travis zone, Tex.	2
Camp Upton zone, N. Y.	2
Wilmington sanitary district, N. C.	3

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 975.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended Apr. 26, 1919.

	Cases.
Camp A. A. Humphreys zone, Va.	1
Camp Polk zone, N. C.	1
Camp Travis zone, Tex.	1
Wilmington sanitary district, N. C.	2

State Reports for March, 1919.

Place.	New cases reported.
Arizona:	
Maricopa County—	
Buckeye	1
Connecticut:	
Fairfield County—	
Bridgeport	1
New Fairfield	1
Stamford	1
Hartford County—	
Hartford	3
Middlesex County—	
Cromwell	3
East Hampton	1
Middletown	1
New Haven County—	
Derby	3
New Haven	1
New London County—	
New London	1
Preston	1
Total	17
Florida:	
Bay County	1
Bradford County	2
Dade County	1
Miami	6
De Soto County	2
Duval County	1
Jacksonville	4
Pensacola	2
Gadsden County	3
Hillsborough County	3
Tampa	3
Lake County	1
Okeechobee County	1
Palm Beach County	1
Volusia County	3
Total	34
Michigan:	
Bay County—	
Bay City	1
Benzie County—	
Gilmore Township	1
Branch County—	
Bethel Township	1
Michigan—Continued.	
Calhoun County—	
Athens Township	1
Genesee County—	
Flint Township	1
Grand Traverse County—	
Traverse City	1
Gratiot County—	
Alma	5
Ingham County—	
Lansing	1
Kalamazoo County—	
Kalamazoo	1
Kent County—	
Grand Rapids	4
Manistee County—	
Marilla Township	2
Oakland County—	
Troy Township	1
Pontiac	1
Saginaw County—	
Saginaw	1
Wayne County—	
Wyandotte	1
Total	23
Minnesota:	
Carlton County—	
Moose Lake	1
Cass County—	
Ansel Township	1
Itasca County—	
Keewatin	1
Koochiching County—	
International Falls	1
Lyon County—	
Marshall	1
Martin County—	
Fairmont	1
Nicollet County—	
St. Peter	24
Pennington County—	
St. Hilaire	1
Ramsey County—	
St. Paul	2
Rice County—	
Faribault	1
Northfield	1

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TYPHOID FEVER—Continued.

State Reports for March, 1919—Continued.

Place.	New cases reported.
Minnesota—Continued.	
St. Louis County—	
Ely	2
Hibbing	1
Kinney	3
Kitzville	1
Carson Lake	1
Great Scott Township	3
Stunts Township	8
Stevens County—	
Hancock	1
Winona County—	
Winona	1
Total	56
Mississippi:	
Adams County	2
Alcorn County	1
Amite County	1
Attala County	1
Benton County	1
Bolivar County	9
Calhoun County	1
Carroll County	4
Chickasaw County	3
Coahoma County	2
Copiah County	3
Covington County	2
De Soto County	1
Franklin County	5
Harrison County	2
Hinds County	9
Holmes County	11
Itawamba County	4
Jefferson County	1
Jefferson Davis County	2
Jones County	1
Kemper County	1
Lafayette County	2
Lee County	3
Leflore County	1
Lincoln County	3
Madison County	3
Marion County	3
Marshall County	1
Neshoba County	3
Panola County	9
Perry County	2
Pontotoc County	1
Prentiss County	1
Scott County	2
Simpson County	1
Sunflower County	4
Tallahatchie County	3
Tate County	2
Tippah County	2
Union County	1
Walthall County	1
Warren County	5
Washington County	1
Webster County	2
Wilkinson County	2
Yalobusha County	6
Yazoo County	1
Total	131
North [illegible]	
[illegible]	1
[illegible]	1
[illegible]	1

TYPHOID FEVER—Continued.

State Reports for March, 1919—Continued.

Place.	New cases reported.
Pennsylvania—Continued.	
Schuylkill County	1
Susquehanna County	1
Tioga County	1
Union County	4
Washington County	2
Westmoreland County	3
York County	6
Total	140
Rhode Island:	
Providence	1
Pawtucket	1
West Warwick (town)	1
Total	3
Washington:	
Franklin County—	
Pasco	1
King County	2
Seattle	2
Pierce County—	
Tacoma	1
Skagit County	5
Mount Vernon	1
Sedro Woolley	2
Spokane County—	
Cheney	1
Total	15
Wyoming:	
Washakie County	1

City Reports for Week Ended Apr. 12, 1919.

Place.	Cases.	Deaths.
Allentown, Pa.	1	
Anniston, Ala.	1	
Baltimore, Md.	3	
Berkeley, Calif.	1	
Boston, Mass.	5	
Burlington, Iowa	1	
Chicago, Ill.	2	
Cincinnati, Ohio	1	
Columbia, S. C.	1	
Covington, Ky.	2	1
Dallas, Tex.	1	
Dayton, Ohio	2	
Detroit, Mich.	1	1
Erie, Pa.	2	
Everett, Wash.	2	
Hammond, Ind.	1	
Homestead, Pa.	1	
Houston, Tex.	2	1
Independence, Mo.	2	
Ironton, Ohio	3	
Kalamazoo, Mich.	1	1
Kansas City, Mo.	1	
Laurel, Miss.	1	
Lawrence, Mass.	2	
Los Angeles, Calif.	2	
Louisville, Ky.	1	1
Manchester, N. H.	1	
Memphis, Tenn.	24	8
Meriden, Conn.	2	
Missoula, Mont.	1	
Monessen, Pa.	1	
Muscatine, Iowa	1	
Nashville, Tenn.	1	
Newark, N. J.	1	
Newburgh, N. Y.		1
New Castle, Pa.	1	
New Haven, Conn.	2	
New Orleans, La.	2	1
New York, N. Y.	11	1
Philadelphia, Pa.	5	1
Pittsburgh, Pa.	1	
Portland, Me.	1	
Roanoke, Va.	1	
Sacramento, Calif.	2	
St. Louis, Mo.	3	1
San Antonio, Tex.	1	1
Sanford, Me.	1	
Seattle, Wash.	1	
Stockton, Calif.	1	
Uniontown, Pa.	1	
Washington, Pa.	1	
Wichita, Kans.	1	
Wilmington, Del.	1	
Winona, Minn.	1	
Worcester, Mass.	1	
Yonkers, N. Y.	1	

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for March, 1919.

State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.
Arizona	2	6	1
Connecticut	281	869	239
Florida	8	142	11
Iowa	51		191
Michigan	605	396	614
Minnesota	287	300	308
Mississippi	37	526	122
North Carolina	84	1,325	38
North Dakota	8	18	141
Ohio	323	1,297	648
Pennsylvania	1,160	6,157	903
Rhode Island	67	18	89
South Carolina	56	16	10
Washington	65	247	194
Wyoming	7	60	28

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Apr. 12, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census. Bureau).	Total deaths (from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Adams, Mass.	14,406	2	1							
Akron, Ohio	98,604	81	2		67		4		6	
Alameda, Calif.	28,433	2	3		2				1	
Alexandria, La.	16,232	5								
Allentown, Pa.	65,109		2		42		1		5	
Alton, Ill.	28,783	9								2
Altoona, Pa.	59,712		6				3			
Anderson, Ind.	24,230	7								2
Ann Arbor, Mich.	15,041	4	2				4			
Anniston, Ala.	14,326				2		1			
Ansonia, Conn.	16,854	3								
Appleton, Wis.	16,005	2								2
Arlington, Mass.	13,073	4	1				2	1		
Asbury Park, N. J.	14,629	4	1		1					
Ashtabula, Ohio	22,008	4			1					
Astoria, Oreg.	10,487				8					
Atchison, Kans.	16,765						4			
Atlanta, Ga.	199,144	55	1		12		9	1	4	6
Atlantic City, N. J.	59,515	14	2		1				1	
Attleboro, Mass.	19,776	4	1						1	
Austin, Tex.	35,612	4					5			1
Baltimore, Md.	594,637	230	22	2	39	1	267		19	25
Barre, Vt.	12,401	2								
Baton Rouge, La.	17,544	6			2				4	3
Battle Creek, Mich.	30,159		7		29		4			
Bayonne, N. J.	72,204		6						2	
Beatrice, Nebr.	10,437	4			1		1			
Beaver Falls, Pa.	13,749		2							
Bedford, Ind.	10,613	1	1							
Bellaire, Ohio	14,575	3			1				2	
Belleville, N. J.	12,797						5		1	
Bellingham, Wash.	34,362		1		1		4			
Beloit, Wis.	18,547	3	1				1		1	
Benton Harbor, Mich.	11,099	3								
Berkeley, Calif.	60,425	7					1		3	1
Berlin, N. H.	13,562	3								
Bethlehem, Pa.	14,333		2		20					
Beverly, Mass.	22,129	3							1	
Billings, Mont.	15,123						10			
Binghamton, N. Y.	54,844	15	1		1		5		1	1
Bloomfield, N. J.	19,612		1				1			
Bloomington, Ind.	11,661	3	1						1	1
Bluefield, W. Va.	15,123						3			
Boise, Idaho	35,931	6			1		2			
Boston, Mass.	767,813	282	33	1	8		71	2	36	31
Brazil, Ind.	10,472	3			7				1	
Bridgeport, Conn.	124,724	40	7		12	1	3		3	
Bristol, Conn.	16,518	5	1				1			
Brockton, Mass.	60,172	12	2				5		1	
Brookline, Mass.	35,956	1			6		4		2	
Brunswick, Ga.	10,124	4			6				1	
Buffalo, N. Y.	473,721	173	45	5	56		25		20	20
Burlington, Iowa	25,144	7					2			
Burlington, Vt.	21,342	14	1		21					1
Butler, Pa.	20,277		1				1			
Butte, Mont.	44,165		1				4			
Cadillac, Mich.	10,136	3					1			
Cairo, Ill.	15,203	4			1					1
Cambridge, Mass.	114,220	29	3		5		1		4	4
Camden, N. J.	118,337	1	1						4	
Canton, Ohio	87,836	15			10		2		1	
Cape Girardeau, Mo.	11,236	2								
Carbondale, Pa.	19,717						1			
Cedar Rapids, Iowa	39,141						1			
Centralia, Ill.	11,256						1			
Champaign, Ill.	15,229	3								1
Chanute, Kans.	12,988	3								
Charleston, S. C.	61,541	25								3
Charleston, W. Va.	31,160	15	2				1			1
Charlotte, N. C.	46,338	24			30		2			1
Chelsea, Mass.	40,370	14			2		2		3	1
Chester, Pa.	41,856		1		4				1	
Chicago, Ill.	2,547,201	721	107	5	737	11	60	3	288	98

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Apr. 12, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census. Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Chicopee, Mass.	29,959	5	1	1	.....	.....	.....	.....	1	.....
Chillicothe, Ohio.	15,625	2	1	.....	.....	.....	1	.....	1	.....
Cincinnati, Ohio.	414,248	131	10	.....	22	.....	25	1	21	9
Cleveland, Ohio.	692,259	282	13	2	20	2	8	2	9	25
Clinton, Iowa.	27,678	.....	1	.....	.....	.....	.....	.....	.....	.....
Clinton, Mass.	[1] 13,075	3	.....	.....	.....	.....	.....	.....	.....	1
Coatesville, Pa.	14,998	.....	.....	.....	22	.....	.....	.....	.....	.....
Coffeyville, Kans.	18,331	.....	.....	.....	4	.....	.....	.....	.....	.....
Cohoes, N. Y.	25,292	7	.....	.....	.....	.....	.....	.....	.....	1
Colorado Springs, Colo.	38,965	10	.....	.....	1	.....	2	.....	9	4
Columbus, Ohio.	220,135	68	6	.....	9	.....	2	.....	7	6
Concord, N. H.	22,858	11	.....	.....	1	.....	1	.....	1	.....
Connellsville, Pa.	15,876	.....	4	.....	.....	.....	.....	.....	.....	.....
Corpus Christi, Tex.	10,789	2	.....	.....	.....	.....	.....	.....	.....	.....
Council Bluffs, Iowa.	31,838	14	2	.....	.....	.....	.....	.....	.....	2
Covington, Ky.	59,623	16	2	.....	.....	.....	3	.....	2	1
Cranston, R. I.	26,773	13	.....	.....	.....	.....	.....	.....	3	3
Cumberland, Md.	28,686	5	1	.....	22	.....	.....	.....	.....	.....
Dallas, Tex.	129,738	29	1	.....	.....	.....	2	.....	1	3
Danbury, Conn.	22,931	6	1	.....	.....	.....	1	.....	.....	.....
Danvers, Mass.	10,037	.....	3	.....	.....	.....	.....	.....	1	.....
Danville, Ill.	32,969	16	.....	.....	1	.....	.....	.....	1	.....
Dayton, Ohio.	128,939	38	.....	.....	1	.....	2	.....	2	.....
Denver, Colo.	268,439	68	3	.....	3	.....	4	.....	.....	16
Des Moines, Iowa.	104,052	.....	2	.....	.....	.....	10	.....	2	.....
Detroit, Mich.	619,648	245	73	5	38	2	67	2	49	15
Dover, N. H.	13,276	3	.....	.....	.....	.....	.....	.....	.....	.....
Du Bois, Pa.	14,994	.....	.....	.....	.....	.....	1	.....	.....	.....
Dubuque, Iowa.	40,096	.....	1	1	.....	.....	.....	.....	.....	.....
Duluth, Minn.	97,077	16	1	.....	25	.....	2	.....	6	1
Durham, N. C.	26,160	4	.....	.....	17	.....	.....	.....	.....	.....
East Chicago, Ind.	30,286	8	.....	.....	.....	.....	.....	.....	.....	.....
Easthampton, Mass.	10,656	1	2	.....	.....	.....	.....	.....	.....	1
Easton, Pa.	30,854	.....	.....	.....	2	.....	1	.....	.....	.....
East Orange, N. J.	43,761	7	4	.....	1	.....	.....	.....	1	2
East Providence, R. I.	18,485	.....	1	.....	.....	.....	3	.....	.....	.....
Eau Claire, Wis.	18,887	.....	1	.....	12	.....	18	.....	.....	.....
Elgin, Ill.	28,562	1	.....	.....	.....	.....	.....	.....	.....	.....
Elizabeth, N. J.	88,830	.....	6	.....	2	.....	6	.....	2	3
Elmira, N. Y.	38,272	12	1	.....	1	.....	.....	.....	.....	.....
El Paso, Tex.	69,149	38	.....	.....	1	.....	1	.....	.....	11
Englewood, N. J.	12,603	2	.....	.....	.....	.....	.....	.....	.....	1
Erie, Pa.	76,502	.....	3	.....	.....	.....	1	.....	7	.....
Eureka, Calif.	15,142	2	.....	.....	.....	.....	.....	.....	.....	.....
Everett, Mass.	40,160	4	2	.....	1	.....	2	.....	1	1
Everett, Wash.	37,205	.....	.....	.....	1	.....	1	.....	3	.....
Fall River, Mass.	129,828	38	6	.....	68	4	1	.....	8	4
Fargo, N. Dak.	17,872	2	.....	.....	7	.....	9	.....	.....	.....
Farrell, Pa.	10,190	.....	.....	.....	1	.....	.....	.....	.....	.....
Findlay, Ohio.	14,858	2	.....	.....	.....	.....	.....	.....	.....	.....
Flint, Mich.	57,386	15	1	.....	.....	.....	.....	.....	.....	.....
Fond du Lac, Wis.	21,486	7	.....	.....	.....	.....	5	.....	.....	1
Fort Scott, Kans.	10,564	5	.....	.....	.....	.....	.....	.....	.....	.....
Fort Wayne, Ind.	78,014	26	1	.....	.....	.....	.....	.....	2	4
Fort Worth, Tex.	109,597	12	.....	.....	.....	.....	.....	.....	2	2
Fostoria, Ohio.	10,959	1	1	.....	.....	.....	.....	.....	.....	.....
Framington, Mass.	14,149	8	.....	.....	.....	.....	.....	.....	.....	.....
Frederick, Md.	11,225	7	.....	.....	.....	.....	2	.....	.....	.....
Fremont, Nebr.	10,080	2	.....	.....	.....	.....	.....	.....	.....	.....
Fremont, Ohio.	11,034	2	.....	.....	.....	.....	.....	.....	.....	.....
Fresno, Calif.	36,314	7	.....	.....	.....	.....	.....	.....	.....	.....
Galesburg, Ill.	24,629	10	.....	.....	3	.....	.....	.....	.....	2
Galveston, Tex.	42,650	12	.....	.....	.....	.....	.....	.....	.....	.....
Geneva, N. Y.	13,915	2	.....	.....	.....	.....	.....	.....	.....	.....
Gloversville, N. Y.	22,314	.....	.....	.....	1	.....	.....	.....	2	.....
Grand Forks, N. Dak.	16,342	4	.....	.....	.....	.....	1	.....	.....	.....
Great Falls, Mont.	[1] 13,948	8	.....	.....	5	.....	1	.....	.....	.....
Green Bay, Wis.	30,017	11	.....	.....	.....	.....	.....	.....	1	1
Greenfield, Mass.	12,251	7	.....	.....	1	.....	.....	.....	1	.....
Greensboro, N. C.	20,171	7	.....	.....	.....	.....	.....	.....	.....	.....
Greensburg, Pa.	15,881	.....	1	.....	16	.....	2	.....	.....	.....
Greenville, S. C.	18,574	.....	.....	.....	3	.....	.....	.....	.....	.....
Greenwich, Conn.	19,594	.....	2	.....	1	.....	.....	.....	1	1

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd

City Reports for Week Ended Apr. 12, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Hackensack, N. J	17,412	5							1	
Hammond, Ind	27,016	23								2
Harrisburg, Pa	73,276		5		49		1			
Hartford, Conn	112,831	36	7	1	31	1	7		1	2
Haverhill, Mass	49,180	10							5	
Hazelton, Pa	28,981		2		1		1			
Highland Park, Mich	33,859	8		2					1	2
High Point, N. C	13,439	1			4					
Hoboken, N. J	78,324	15	10		4		1			
Holland, Mich	12,459	3								
Holyoke, Mass	66,503	16					5		1	1
Hoquiam, Wash	12,230						1			
Houston, Tex	116,878	34			1		1		1	1
Hudson, N. Y	12,898	4								
Hutchinson, Kans	21,461		1		2					
Independence, Mo	11,964	4			35	1				
Indianapolis, Ind	283,622	94	7		62		13		9	1
Ironton, Ohio	14,079	7			1					
Ironwood, Mich	15,095	7								
Ithaca, N. Y	16,017	4					5		1	
Janesville, Wis	14,411	10								
Jersey City, N. J	312,557		23		28		9		11	
Johnstown, N. Y	10,678	2								
Johnstown, Pa	70,473		2		2		2			
Joplin, Mo	33,400	5			1				2	
Kalamazoo, Mich	50,408	23	6	1	1		7		2	
Kankakee, Ill	14,270		1							
Kansas City, Kans	102,096		2		10				6	
Kansas City, Mo	305,816	111	6	1	55		4		2	4
Kearny, N. J	24,325	10					1		4	
Keene, N. H	10,725	5								
Kenosha, Wis	32,833	4			53		3		2	
Knoxville, Tenn	59,112				8		1			
Kokomo, Ind	21,929	9					4			2
Lackawanna, N. Y	16,219	2	2				2			
La Crosse, Wis	31,833	10	1						11	1
La Fayette, Ind	21,481	9			1		3			
Lakewood, Ohio	23,813	8					2			
Lancaster, Ohio	16,086	4					1			
Lancaster, Pa	51,437				42				3	
Lawrence, Kans	13,477	1							1	
Lawrence, Mass	102,923	30	3				7		5	4
Leominster, Mass	21,365	6			3				4	2
Lexington, Ky	41,997	24			17		1			1
Lima, Ohio	37,145	18	1				10			1
Lincoln, Nebr	46,937	22	1		2					
Little Rock, Ark	58,716	11			1		7		3	4
Lockport, N. Y	20,028	7			51					
Logansport, Ind	21,338	10					6			1
Long Beach, Calif	29,163	17			2				2	2
Long Branch, N. J	15,733	4					3			1
Lorain, Ohio	38,266	13	1		19					
Los Angeles, Calif	535,485	147	9	1	13		8		38	17
Louisville, Ky	240,808	85	5		9		19	1	3	5
Lowell, Mass	114,366	34			4		5		2	4
Ludington, Mich	10,366	1								
Lynchburg, Va	33,497	13								1
Lynn, Mass	104,534	22	1	1	35	1	4		6	1
McKeesport, Pa	48,299				5				2	
Macon, Ga	46,099	19			1				1	1
Madison, Wis	31,315	4			6		1			
Mahanoy City, Pa	17,709				1					
Malden, Mass	52,243	8	1				3		4	
Manchester, Conn	15,859	2								
Manchester, N. H	79,607	22	1	1			1		7	2
Manitowoc, Wis	13,931	7								
Mankato, Minn	[1] 10,365		1						1	
Marinette, Wis	[1] 14,610	8			3					
Marion, Ind	19,923	9					7		2	
Marlboro, Mass	15,285	4	3		1					
Marshalltown, Iowa	14,519		1							
Martinsburg, W. Va	12,984		1		8		4			
Martins Ferry, Ohio	10,135	1								

[1] Population Apr. 15, 1919.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Apr. 12, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Mason City, Iowa	14,938		5							
Medford, Mass	26,681	9	2				1		2	1
Melrose, Mass	17,724	2			1		1			
Memphis, Tenn	151,877	70	1	1	104		5		18	8
Meriden, Conn	29,431						3			1
Methuen, Mass	14,320	3								
Middletown, N. Y	15,880		1		1				1	
Middletown, Ohio	16,384	4			2					
Milford, Mass	14,280								1	1
Milwaukee, Wis	445,008	136	6	1	3		17	2	20	8
Minneapolis, Minn	373,448	104	13		23		33	1	25	11
Missoula, Mont	19,075	9								
Mobile, Ala	59,201	26	1		3					1
Moline, Ill	27,976	6					2			3
Monessen, Pa	23,070		2				1			
Montclair, N. J	27,087	1			2				1	
Montgomery, Ala	44,039	20					1			1
Morristown, N. J	13,410	4					1		1	
Mount Carmel, Pa	20,709		2		3		2			
Mount Vernon, N. Y	37,991	9	3				1		2	
Nanticoke, Pa	23,811		1		5					
Nashua, N. H	27,541	11					5			
Nashville, Tenn	118,136	46	1	1	17	1	1	1	1	2
Natick, Mass	10,140		1						1	
Newark, N. J	418,789	111	32	3	4		21	1	37	12
New Bedford, Mass	121,622	40	1		1		3		10	5
New Britain, Conn	55,395	12			59					2
New Brunswick, N. J	25,855				5					
Newburgh, N. Y	29,893	11								1
Newburyport, Mass	15,291	4							1	
New Castle, Pa	41,915		1				2			
New Haven, Conn	152,275	41	5		14	1	3		7	4
New London, Conn	21,199	10	2				4		2	
New Orleans, La	377,010	143	10	1	6		2		24	10
Newport, Ky	32,133	13					2		2	2
Newport, R. I	30,585	4					3		1	1
Newton, Mass	44,345	10	3		1		1			
New York, N. Y	5,737,492	1,611	347	38	86	4	152	2	280	165
Niagara Falls, N. Y	38,466	19			4		2		1	
Norfolk, Va	91,148		1		3		1			3
North Adams, Mass	[1] 22,019	7							2	
Northampton, Mass	20,006	9	1		2		3			
North Braddock, Pa	15,684		1						3	
North Tonowanda, N. Y	14,060	13			39					1
Norwalk, Conn	27,332		1							
Norwich, Conn	21,923				1		1		2	
Norwood, Ohio	23,269	7			1					
Oakland, Calif	206,405	50	3				1		9	8
Oak Park, Ill	27,816	9	1		20		2			
Ogdensburg, N. Y	16,845	3								
Ogden, Utah	32,343	5	1							
Oil City, Pa	20,162				16					
Oklahoma City, Okla	97,588	21	1				5		1	2
Old Forge, Pa	15,479		1							
Olean, N. Y	16,927	5								
Omaha, Nebr	177,777	39	1		7		3			2
Orange, Conn	14,393	10			8					4
Orange, N. J	33,636	12								
Oshkosh, Wis	36,549	6					2			
Palestine, Tex	12,075	2							1	
Parkersburg, W. Va	21,059	8					5			
Pasadena, Calif	49,620	11	2						4	
Passaic, N. J	74,478	14	3		2		3			2
Paterson, N. J	140,512		7				9		20	
Peekskill, N. Y	19,034	5								
Pekin, Ill	10,973		2							
Peoria, Ill	72,184	20	1				2		4	2
Perth Amboy, N. J	42,646	9	2						4	
Philadelphia, Pa	1,735,514	564	86	14	117	1	90	2	136	51
Phillipsburg, N. J	15,879	5	3						1	2
Phoenixville, Pa	11,871				3					
Piqua, Ohio	14,275	5								
Pittsburgh, Pa	586,196		13		8		4		19	

[1] Population Apr. 15, 1910.

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Richmond, Va.	158,702	48	1		36	1	3		44	
Riverside, Calif.	20,496	7					5			
Roanoke, Va.	46,282	30			32		2			
Rochester, N. Y.	284,714				7	2	15		13	
Rockford, Ill.	56,739	11			43		5	1		
Rock Island, Ill.	29,452	12								
Rocky Mount, N. C.	12,673	3	1		1					1
Rome, N. Y.	24,259		1						2	
Rutland, Vt.	15,038	7								
Sacramento, Calif.	68,984	16							7	4
Saginaw, Mich.	56,469	20	1				1			2
St. Joseph, Mo.	86,498	38	3				2			4
St. Louis, Mo.	768,650	219	51	1	42		23	1	44	11
St. Paul, Minn.	252,465	61	36	1	58	1	11		32	8
Salem, Mass.	49,346	12	3				3		1	1
Salt Lake City, Utah	121,623	26					6			1
San Angelo, Tex.	[1] 10,321	2								2
San Antonio, Tex.	128,215				5		1		6	4
San Bernardino, Calif.	17,616	6								2
San Diego, Calif.	56,412	26	2		1		3		10	5
Sandusky, Ohio.	20,226	12							1	2
Sanford, Me.	11,217	4								
Santa Barbara, Calif.	15,360	9								1
Santa Cruz, Calif.	15,150	5								
Saratoga Springs, N. Y.	13,839	4								
Saugus, Mass.	10,210		2		1					
Sault Ste. Marie, Mich.	14,130	1								
Schenectady, N. Y.	103,774	26	2				4		4	3
Scranton, Pa.	149,541		3				3		5	
Seattle, Wash.	366,445		10		33		12			
Shamokin, Pa.	21,274		2						1	
Sioux City, Iowa.	58,568		2				2			
Somerville, Mass.	88,618	21	4		2		2		4	1
South Bend, Ind.	70,967	14			39					3
Southbridge, Mass.	14,465	1								1
Spartanburg, S. C.	21,985	7					1			1
Springfield, Ill.	62,623	18							14	1
Springfield, Mass.	108,668	27	6		3	1	2		3	2
Springfield, Mo.	41,169	13								1
Springfield, Ohio.	52,296	15			24				1	
Steelton, Pa.	15,759				9				2	
Steubenville, Ohio.	28,259	17					1			1
Stockton, Calif.	36,209	5	1							
Streator, Ill.	14,313	3	1							2
Superior, Wis.	47,167	14							4	1
Syracuse, N. Y.	158,559	41	3		2		2			
Tacoma, Wash.	117,446		1		10		3		4	1
Taunton, Mass.	36,610	18			17				4	9
Terre Haute, Ind.	67,361	19								
Tiffin, Ohio.	12,962	5								
Toledo, Ohio.	202,010	85	1		15		4	1	16	3

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Apr. 12, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Trenton, N. J	113,974	.....	4	1	21	.....	.....	.....	8	6
Troy, N. Y	78,094	33	4	1	.....	.....	10	.....	1	2
Uniontown, Pa	21,600	.....	.....	.....	.....	.....	1	.....	.....	.....
Utica, N. Y	89,272	34	2	.....	8	.....	.....	.....	7	1
Wakefield, Mass	12,947	4	.....	.....	.....	.....	2	.....	.....	.....
Walla Walla, Wash	26,067	.....	.....	.....	.....	.....	1	.....	1	.....
Waltham, Mass	31,011	9	.....	.....	.....	.....	4	.....	1	1
Washington, D. C	369,282	113	13	2	5	.....	49	.....	32	13
Washington, Pa	22,076	.....	1	.....	.....	.....	1	.....	.....	.....
Waterbury, Conn	89,201	3	5	1	10	.....	18	.....	2	2
Watertown, Mass	15,188	5	.....	.....	2	.....	.....	.....	.....	.....
Watertown, N. Y	30,404	.....	.....	.....	.....	.....	.....	.....	.....	2
Wausau, Wis	19,666	2	.....	.....	.....	.....	.....	.....	.....	.....
West Chester, Pa	13,403	.....	1	.....	1	.....	10	.....	.....	.....
Westfield, Mass	18,769	6	1	.....	.....	.....	4	.....	1	2
West Hoboken, N. J	44,386	.....	.....	.....	3	.....	.....	.....	3	.....
West New York, N. J	19,613	8	3	.....	.....	.....	.....	.....	1	.....
West Orange, N. J	13,964	5	.....	.....	.....	.....	.....	.....	.....	1
Wheeling, W. Va	43,657	20	.....	.....	.....	.....	.....	.....	.....	1
White Plains, N. Y	23,331	1	1	.....	.....	.....	.....	.....	.....	.....
Wichita, Kans	73,597	23	.....	.....	1	.....	.....	.....	3	4
Wilkes-Barre, Pa	78,334	.....	2	.....	34	.....	2	.....	2	.....
Wilkinsburg, Pa	23,899	.....	.....	.....	1	.....	.....	.....	.....	.....
Williamsport, Pa	34,123	.....	3	.....	.....	.....	7	.....	.....	.....
Wilmington, Del	95,369	23	2	.....	.....	.....	.....	.....	.....	3
Wilmington, N. C	30,400	10	1	.....	.....	.....	.....	.....	3	1
Winchester, Mass	10,812	2	.....	.....	.....	.....	1	.....	.....	.....
Winona, Minn	[1] 18,583	6	1	.....	.....	.....	.....	.....	.....	.....
Winston-Salem, N. C	33,136	17	3	.....	49	.....	.....	.....	3	3
Winthrop, Mass	13,105	1	.....	.....	.....	.....	.....	.....	1	1
Woburn, Mass	16,076	4	.....	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass	166,106	48	6	.....	48	.....	6	.....	6	3
Yakima, Wash	22,058	.....	.....	.....	.....	.....	1	.....	.....	.....
Yonkers, N. Y	103,066	37	2	1	4	.....	1	.....	7	2
York, Pa	52,770	.....	4	.....	.....	.....	4	.....	3	.....
Youngstown, Ohio	112,282	31	4	.....	110	2	6	.....	.....	1
Zanesville, Ohio	31,320	10	.....	.....	.....	.....	2	.....	1	1

[1] Population Apr. 15, 1910.

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CHINA.

Cerebrospinal Meningitis—Honan Province.

Epidemic cerebrospinal meningitis with many fatalities was reported March 1, 1919, at Loshan, in the inland province of Honan, China.

Influenza—Hankow—On Vessel.

Influenza was reported present at Hankow, China, early in March, 1919, the disease occurring chiefly among children in the foreign settlement. On March 15 influenza was stated to be prevalent and an outbreak on the British naval vessel *Bee* was reported.

Influenza—Shanghai.[1]

On March 5, 1919, influenza was reported to be increasing rapidly at Shanghai.

CUBA.

Communicable Diseases—Habana.

Communicable diseases have been notified at Habana as follows:

Diseases.	Mar. 21–31, 1919.		Remaining under treatment Mar. 31, 1919.	Diseases.	Mar. 21–31, 1919.		Remaining under treatment Mar. 31, 1919.
	New cases.	Deaths.			New cases.	Deaths.	
Broncho-pneumonia	5	3	7	Measles	1	.....	1
Diphtheria	1	.....	2	Scarlet fever	.....	.....	1
Influenza	20	3	30	Typhoid fever	10	4	[2]2
Leprosy	.....	.....	17	Varicella	.....	.....	2
Malaria	17	.....	[3]22				

[1] Public Health Reports, Apr. 25, 1919, p. 872. [2] From the interior, 22. [3] From the interior, 19.

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GREECE.

Typhus Fever—Piræus.

Typhus fever was reported present at Piræus, Greece, April 10, 1919.

INDO-CHINA.

Cholera—Plague—Smallpox—Diminished Prevalence.[1]

The reported prevalence of cholera, plague, and smallpox in Indo-China diminished notably in September and October, 1918. As regards cholera, 50 cases were reported in September and 33 in October, as against 213 cases in August, 1918. In September 19 cases of plague were reported and in October 17, as against 52 in August, 1918. In September 91 cases of smallpox were reported and in October 118 cases, as against 209 cases reported in August, 1918.

Influenza.

Epidemic influenza was reported present in Indo-China in July and August, 1918, and during the months of September and October, 1918, it was reported to be prevalent throughout the several Provinces, being especially severe among natives and occurring frequently with broncho-pneumonia complications.

Leprosy.

During the month of September, 1918, 11 cases of leprosy were reported in Indo-China, and in October, 1918, 9 cases. The occurrence was in the Provinces of Cochin-China and Tonkin.

JAPAN.

Cerebrospinal Meningitis—Nagoya.

A case of cerebrospinal meningitis occurring in a soldier repatriated from Siberia was reported February 11, 1918, at Nagoya, Japan.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended May 2, 1919.[2]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Feb. 16-22	162	109	
Calcutta	do		17	
Madras	Feb. 23-Mar. 8	26	13	
Rangoon	Feb. 16-22	1		
Indo-China:				
Provinces				Sept. 1-30, 1918: Cases, 50; deaths, 36.
Cambodia	Sept. 1-30	1	1	
Cochin-China	do	48	35	
Tonkin	do	1		
Provinces				Oct. 1-31, 1918: Cases, 33; deaths, 24.
Cambodia	Oct. 1-31	1	1	
Cochin-China	do	31	23	
Tonkin	do	1		

[1] Public Health Reports, Jan. 3, 1919, pp. 30, 31.
[2] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended May 2, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands:				
Manila	Nov. 10–16	28	14	
Provinces				Nov. 10–16, 1918: Cases, 282; deaths, 260. (Received out of date.)
Batangas	Nov. 10–16	23	24	
Bohol	do	10	7	
Bulacan	do	2	2	
Cavite	do	16	12	
Cebu	do	9	7	
Iloilo	do	33	21	
Mindoro	do	3	9	
Oriental Negros	do	6	6	
Pangasinan	do	166	150	
Tayabas	do	3	2	
Provinces				Mar. 1–7, 1919: Cases, 82; deaths, 56.
Batangas	Mar. 1–7	16	9	
Bohol	do	7	5	
Iloilo	do	8	4	
Laguna	do	27	21	
Misamis	do	13	5	
Occidental Negros	do	2	2	
Pampanga	do	6	4	
Pangasinan	do	3	6	

PLAGUE.

Ceylon:				
Colombo	Feb. 23–Mar. 1		1	
China:				
Hing-Ning district	Mar. 15			Present.
Ecuador:				
Duran	Mar. 1–15	1		
Guayaquil	do	7	1	
Egypt				Jan. 1–Mar. 30, 1919: Cases, 67; deaths, 66.
Provinces—				
Assiout	Mar. 8–15	3	2	
Suez	Mar. 8–16	15	7	
India				Feb. 16–22, 1919: Cases, 3,428; deaths, 2,631.
Bombay	Feb. 16–22	4	2	
Calcutta	do		13	
Karachi	do	2	2	
Madras	Feb. 23–Mar. 8	2	3	
Madras Presidency	do	566	422	
Rangoon	Feb. 16–22	25	23	
Indo-China:				
Provinces				Sept. 1–30, 1918: Cases, 19; deaths, 15.
Anam	Sept. 1–30	3	3	
Cambodia	do	11	11	
Cochin China	do	5	1	
Provinces				Oct. 1–31, 1918: Cases, 17; deaths, 15.
Anam	Oct. 1–31	2	2	
Cambodia	do	12	12	
Cochin China	do	3	1	

SMALLPOX.

Ceylon:				
Colombo	Feb. 16–22	1		
China:				
Amoy	Mar. 4–10	1		
Chungking	Feb. 16–Mar. 1			Present.
Nanking	Mar. 9–15			Do.
India:				
Bombay	Feb. 16–22	44	20	
Calcutta	do		18	
Karachi	Mar. 2–8	25	5	
Madras	Feb. 23–Mar. 8	39	20	
Rangoon	Feb. 16–22	77	33	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended May 2, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China:				
Provinces				Sept. 1-30, 1918: Cases, 91; deaths, 44.
Anam	Sept. 1-30	37	12	
Cambodia	do	33	17	
Cochin China	do	27	15	
Tonkin	do	5		
Provinces				Oct. 1-31, 1918: Cases, 118; deaths, 31.
Anam	Oct. 1-31	22	4	
Cambodia	do	54	17	
Cochin China	do	38	10	
Tonkin	do	4		
Italy:				
Genoa	Mar. 1-15	2	1	
Messina	Feb. 5-Mar. 2	47	5	
Japan:				
Taihoku	Mar. 12-18	1		
Mexico:				
Ciudad Juarez	Mar. 29-Apr. 5	1		
Vera Cruz	Apr. 6-12		1	
Philippine Islands:				
Manila	Nov. 10-16	1		
Do	Mar. 2-22	14	13	
Siberia:				
Vladivostok	Mar. 1-15	7		

TYPHUS FEVER.

Mexico:				
Guadalajara	Feb. 1-28		1	
Netherlands:				
Rotterdam	Mar. 16-22	20	1	
Siberia:				
Vladivostok	Mar. 1-15	70	6	

YELLOW FEVER.

Brazil:				
Bahia	Jan. 12-18	2		
Ecuador:				
Babahoyo	Mar. 1-15	1		
Duran	do	1		
Guayaquil	do	9	8	
Milagro	do	1	1	

Reports Received from Dec. 28, 1918, to Apr. 25, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17-30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13-19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18-Dec. 28	1,351	1,031	
Do	Dec. 29-Feb. 15	9,464	8,364	
Calcutta	Sept. 20-Dec. 21		241	Report for Nov. 23, 1918, missing.
Do	Dec. 29-Feb. 8		720	
Karachi	Jan. 26-Feb. 8	2	2	
Madras	Oct. 5-Dec. 28	264	164	Oct. 27-Nov. 2, 1918: Cases, 9; deaths, 4.
Do	Jan. 5-Feb. 15	400	282	
Rangoon	Oct. 5-Dec. 21	35	33	
Do	Dec. 29-Feb. 8	14	11	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 25, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China				July 1-Aug. 31, 1918: Cases, 678; deaths, 412.
Anam	July 1-Aug. 31	37	30	
Cambodia	....do	322	169	
Cochin China	....do	357	279	
Saigon	Oct. 7-Dec. 22	75	45	
Do	Dec. 3-Feb. 23	206	122	
Kwang-Chow-Wan	July 1-31	50	34	
Tonkin	July 1-Aug. 31	4		
Java:				
East Java				Oct. 7-Dec. 31, 1918: Cases, 781; deaths, 323. Jan. 1-28, 1919: Cases, 291; deaths, 176.
Surabaya district	Oct. 7-Dec. 31	655	423	
Do	Jan. 1-28	133	84	
Mid-Java				Sept. 25-Dec. 18, 1919: Cases, 3,282; deaths, 2,014.
Samarang	Sept. 26-Oct. 16	120	111	
West Java				Oct. 3-Dec. 11, 1918: Cases, 412; deaths, 238. Dec. 27, 1918-Jan. 23, 1919: Cases, 10; deaths, 3.
Batavia	Oct. 3-Dec. 11	291	148	
Do	Dec. 27-Jan. 23	8	2	
Cheribon	Jan. 3-9	1		
Mesopotamia:				
Bagdad	Oct. 11-18	8		
Philippine Islands:				
Manila	Sept. 22-Dec. 28	181	121	
Do	Dec. 29-Feb. 8	19	9	
Provinces				Nov. 2-9, 1918: Cases, 511; deaths, 417. Nov. 17-Dec. 28, 1918: Cases, 1,203; deaths, 854. Dec. 29, 1918-Feb. 28, 1919: Cases, 985; deaths, 691.
Albay	Dec. 15-21	1	1	
Ambos Camarines	Feb. 15-21	10	2	
Bataan	Nov. 17-Dec. 28	38	32	
Do	Jan. 5-Feb. 8	3	3	
Batangas	Nov. 2-9	156	141	
Do	Nov. 17-Dec. 28	79	65	
Do	Dec. 29-Feb. 8	21	15	
Bohol	Nov. 2-9	19	17	
Do	Nov. 17-Dec. 21	12	5	
Do	Jan. 12-Feb. 21	62	44	
Bulacan	Oct. 27-Nov. 2	5	6	
Do	Nov. 17-Dec. 28	44	30	
Do	Dec. 29-Feb. 21	42	26	
Capiz	Dec. 22-28	7	5	
Do	Jan. 5-25	28	14	
Cavite	Oct. 27-Nov. 2	38	28	
Do	Nov. 17-Dec. 21	163	75	
Do	Dec. 29-Jan. 25	17	16	
Cebu	Dec. 15-21	41	20	
Do	Jan. 12-18	13	12	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 15	56	38	
Iloilo	Oct. 27-Nov. 2	9	6	
Do	Nov. 17-Dec. 21	70	51	
Do	Jan. 5-Feb. 28	162	105	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Feb. 21	91	57	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 21-30	4	5	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-Feb. 28	164	76	
Nueva Ecija	Jan. 12-25	9	6	
Occidental Negros	Feb. 2-28	7	4	
Oriental Negros	Nov. 2-9	20	8	
Do	Nov. 17-Dec. 7	6	6	
Do	Jan. 5-Feb. 8	35	22	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Feb. 28	25	19	
Pangasinan	Nov. 2-9	236	192	
Do	Nov. 17-Dec. 28	428	313	
Do	Dec. 29-Feb. 28	155	115	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-Feb. 8	44	36	
Tayabas	Nov. 2-9	7	4	
Do	Nov. 17-Dec. 28	54	25	
Do	Dec. 29-Feb. 15	69	62	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-Feb. 8	25	21	
Poland:				
Plonsk district	Oct. 2-Nov. 27	5		
Warsaw	Sept. 29-Oct. 26	5	1	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 25, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17–Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 5–Aug. 21, 1918: Cases, 884; deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 279.
Ukrania—				
Ekaterinaslav	Sept. 1–20	7	6	
Odessa	do	25		Sept. 1–20, 1918: 11 cases on s. s. Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27–Nov. 2	1	1	
Do	Feb. 9–15	1	1	
China:				
Amoy	Nov. 24–Dec. 8			Present.
Chungking	Dec. 1–7			Do.
Hongkong	Oct. 1–Dec. 28	4	4	
Do	Jan. 1–31	5	4	
Ecuador:				
Duran	Feb. 16–28	1	1	
Guayaquil	July 1–Dec. 31	20	7	
Do	Jan. 1–Feb. 28	43	13	
Taura	Dec. 16–31	1	1	
Egypt				Jan. 1–Nov. 21, 1918: Cases, 357; deaths, 153. Jan. 1–Mar. 6, 1919: Cases, 134; deaths, 110.
Provinces—				
Assiout	Feb. 24–27	5	2	1 septicemic.
Girgeh	Feb. 22–24	4	2	2 pneumonic.
Minieh	Feb. 21–27	2	2	1 pneumonic.
Suez	Jan. 31–Mar 1	3	2	
India				Sept. 23–Dec. 28, 1918: Cases, 24,279; deaths, 18,369. Dec. 29, 1918–Feb. 15, 1919: Cases, 17,525; deaths, 13,000.
Bombay	Aug. 18–Dec. 28	41	29	
Do	Jan. 12–Feb. 8	6	6	
Calcutta	Dec. 22–28		1	
Do	Jan. 12–Feb. 8		3	
Karachi	Oct. 19–Dec. 28	17	17	
Do	Dec. 29–Jan. 25	5	5	
Do	Feb. 16–22	1	1	
Madras	Dec. 8–28	26	17	
Do	Dec. 29–Feb. 15	129	58	
Madras Presidency	Oct. 13–Dec. 28	1,152	774	Oct. 27–Nov. 2, 1918: Cases, 142; deaths, 38.
Do	Dec. 29–Feb. 15	1,976	1,304	
Rangoon	Oct. 5–Dec. 21	84	81	
Do	Dec. 29–Feb. 15	82	77	
Indo-China				July 1–Aug. 31, 1918: Cases, 125; deaths, 115.
Anam	July 1–Aug. 31	37	32	
Cambodia	do		49	
Cochin-China	do	57	33	
Saigon	Oct. 7–Nov. 24	5	1	
Do	Jan. 13–Feb. 2	3	2	
Do	Feb. 17–23	1	1	
Kwang-Chow-Wan	July 1–31	1	1	
Java:				
East Java				Oct. 7–Nov. 18, 1918: Cases, 109; deaths, 109. Jan. 1–14, 1919: Cases, 69; deaths, 69.
Surabaya (district)	Oct. 7–Dec. 31	92	92	
Do	Jan. 1–14	34	34	
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 14; deaths, 14.
Samarang	Sept. 25–Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16–29	5	2	
Siam:				
Bangkok	Sept. 21–28	4	3	
Do	Oct. 5–12	2	2	
Do	Jan. 19–25	1		
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 25, 1919—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
Brazil:				
Rio de Janeiro	Dec. 1-28	46	19	Oct. 6-12, 1918: Cases, 15, deaths, 10.
Do	Dec. 30-Jan. 25	25	11	
British East Africa:				
Mombasa	Sept. 1-Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-18	2		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 22	6		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 10			Do.
Digby	do			Do.
Halifax	Dec. 7-28	10		
Do	Jan. 5-Mar. 15	161		
Do	Mar. 20-29	20		
Middleton	Dec. 23-Jan. 4			Do.
Sydney	Jan. 5-Mar. 8	4		
Do	Mar. 23-29	7		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-Apr. 12	13		
Toronto	Feb. 2-15	2		
Do	Mar. 16-22	1		
Prince Edward Island—				
Charlotte Town	Feb. 27-Mar. 5	1		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-Mar. 8	30		
Paspebiac	do	8		
Quebec	Dec. 15-21	1		
Do	Dec. 29-Mar. 15	14		
Ceylon:				
Colombo	Jan. 12-18	1		
China:				
Amoy	Oct. 13-Dec. 28			Do.
Do	Jan. 5-Mar. 3			Do.
Antung	Feb. 10-16	1		
Do	Feb. 24-Mar. 2	1		
Canton	Nov. 17-23			Do.
Do	Feb. 9-15			Do.
Chungking	Nov. 10-Dec. 28			Do.
Do	Jan. 5-Feb. 15			Do.
Foochow	Nov. 24-Dec. 28			Do.
Do	Dec. 29-Feb. 8			Do.
Hongkong	Dec. 15-21	1	1	
Do	Feb. 2-8	1		
Do	Feb. 16-22	4		
Nanking	Dec. 1-28			Do.
Do	Dec. 29-Mar. 1			Do.
Shanghai	Jan. 20-26	1		
Tsingtau	Mar. 3-9	1		
Chosen (Korea):				
Chemulpo	Nov. 1-Dec. 31	15	4	
Do	Jan. 1-31	6	1	
Denmark:				
Copenhagen	Nov. 9-Dec. 28	12		
Do	Dec. 29-Jan. 19	15		
Egypt:				
Alexandria	Dec. 17-23	1	1	
Do	Jan. 22-Mar. 11	8	1	
France:				
Bordeaux	Feb. 8-13		1	
Brest	Feb. 2-8	1		
Paris	Mar. 2-15	1		
Germany				Nov. 24-Dec. 7, 1918: Cases, 34.
Dresden	Nov. 24-Dec. 7	18		
Halle	do	4		
Friedland	do	1		
Königsberg	do	8		In persons evacuated from the Ukraine.
Schkeuditz	do	1		
Tilsit	do	1		
Torgau	do	1		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 25, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Great Britain:				
Liverpool	Jan. 26-Mar. 15	7	.....	Of these, 2 from vessels.
London	Mar. 9-15	5	1	
Greece:				
Soloniki	Feb. 2-15	.....	3	
India:				
Bombay	Aug. 18-Dec. 28	35	8	
Do	Dec. 29-Feb. 15	131	42	
Calcutta	Sept. 29-Dec. 28	.....	17	Report for week ended Nov. 23, 1918, missing.
Do	Dec. 29-Feb. 8	.....	80	
Karachi	Sept. 29-Dec. 28	13	4	
Do	Dec. 29-Feb. 22	55	16	
Madras	Oct. 5-Dec. 28	62	40	
Do	Dec. 29-Feb. 18	80	40	
Rangoon	Oct. 20-Dec. 21	32	6	
Do	Dec. 29-Feb. 15	309	102	
Indo-China:				
Anam	July 1-Aug. 31	87	51	
Cambodia	Aug. 1-31	78	40	July 1-Aug. 31, 1918: Cases, 302; deaths, 104.
Cochin-China	July 1-Aug. 31	335	87	
Saigon	Oct. 7-Dec. 22	20	5	
Do	Dec. 30-Feb. 2	8	3	
Do	Feb. 17-23	28	6	
Tonkin	July 1-Aug. 31	11	1	
Italy:				
Genoa	Jan. 9-Mar. 15	4	2	
Messina	Mar. 2-16	3	.....	Cases reported in several localities in Province.
Palermo	Jan. 31-Feb. 20	2	.....	
Japan:				
Kobe	Oct. 26-Dec. 28	186	46	
Do	Dec. 29-Mar. 22	499	165	
Taihoku	Jan. 15-Feb. 11	145	18	Island of Formosa.
Yokohama	Jan. 20-26	1	.....	
Java:				
East Java	.....	.....	.....	Oct. 7-Dec. 31, 1918: Cases, 22; deaths, 1. Jan. 1-21, 1919; Cases, 3; deaths, 3.
Surabaya (district)	Oct. 7-Dec. 31	16	.....	
Do	Jan. 1-7	1	.....	
Do	Jan. 15-21	2	2	
Mid-Java	.....	.....	.....	Sept. 25-Dec. 18, 1918: Cases, 172; deaths, 3.
West Java	.....	.....	.....	Oct. 2-Dec. 11, 1918: Cases, 809; deaths, 263. Dec. 27, 1918-Jan. 23 1919: Cases, 158; deaths, 41.
Batavia	Oct. 2-Dec. 11	185	151	
Do	Dec. 27-Jan. 23	34	23	
Lithuania	.....	.....	.....	Sept. 1-Oct. 16, 1918: Cases, 44.
Manchuria:				
Dairen	Jan. 15-21	1	.....	
Do	Feb. 22-Mar. 7	2	2	
Mesopotamia:				
Bagdad	Oct. 11-Dec. 27	308	97	
Do	Dec. 28-Jan. 10	3	.....	
Mexico:				
Ciudad Juarez	Nov. 24-30	1	.....	
Mexico City	Sept. 22-Dec. 28	23	.....	
Do	Dec. 29-Mar. 22	12	.....	
Vera Cruz	Feb. 10-16	2	.....	
Newfoundland:				
St. Johns	Dec. 6-20	4	.....	
Do	Dec. 28-Mar. 14	21	.....	
Do	Mar. 22-Apr. 11	8	.....	
Outports—				
Avondale	....do	4	.....	
Blaine Harbor	Dec. 14-20	2	.....	
Bay of Islands	Jan. 11-17	6	.....	
Do	Feb. 15-21	10	.....	
Bay Roberts	Dec. 21-27	1	.....	
Bonavista	Jan. 26-31	1	.....	
Brigus Junction	Mar. 1-28	3	.....	
Bryants Cove	Dec. 7-13	3	.....	
Burin	....do	4	.....	
Coleys Point	Dec. 14-20	1	.....	
Curling	Jan. 26-31	3	.....	
Frenchmans Cove	Feb. 1-7	1	.....	
Humbermouth	Mar. 15-21	.....	.....	Present.
Kings Cove	Jan. 18-Mar. 14	2	.....	
Little Paradise	Feb. 9-14	1	.....	
McIvers	Feb. 1-7	15	.....	
Merasheen	....do	.....	.....	Do.
Mercers Cove	Feb. 9-14	1	.....	
Middle Arm	Feb. 1-7	40	.....	Bay of Islands.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 25, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Newfoundland—Continued.				
Outports—Continued.				
Mortons Harbor	Mar. 8–14	1		
Musgrave Harbor	Dec. 7–13	4		
Do	Jan. 11–17	6		Feb. 7, 1919: Present.
Paradise	Dec. 7–13	60		Placentia Bay.
Petitforte	Feb. 15–21	1		
Saddle Hill	do	1		Harbor Grace.
Springdale	Feb. 15–Mar. 7	7		
St. Georges	Feb. 1–Mar. 28	32		Other outports Mar. 29–Apr. 11, 1919: 14 cases.
St. Jacques	Jan. 18–24	2		
Panama				Aug. 1–31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1–25, 1919: Cases, 28.
Colon	Dec. 15–21	1		
Do	Dec. 29–Feb. 9	8		
Philippine Islands:				
Manila	Nov. 2–9	4	3	
Do	Dec. 29–Feb. 28	20	4	Varioloid, 13.
Portugal:				
Lisbon	Nov. 16–Dec. 28	843		
Portuguese East Africa:				
Lourenco Marques				July 1–Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1–3	4		
Do	Jan. 17–23		1	
Do	Feb. 1–28	9	1	
Spain:				
Barcelona	Jan. 9–Feb. 11		5	
Do	Feb. 19–Mar. 11	2		
Bilbao	Jan. 1–Feb. 20	6		
Cadiz	Oct. 1–Dec. 31	18		
Do	Jan. 1–31		17	
Madrid	Sept. 1–Oct. 31	153		
Do	Jan. 1–Feb. 28		74	
Seville	Nov. 1–Dec. 31		8	
Do	Jan. 1–31		3	
Valencia	Nov. 10–Dec. 21	40	9	
Do	Dec. 29–Jan. 25	93	10	
Do	Feb. 16–Mar. 8	160	17	
Straits Settlements:				
Penang	Oct. 6–12	1		
Singapore	Feb. 2–22	3		
Sweden:				
Stockholm	Feb. 2–8		1	
Union of South Africa:				
Cape Town	Aug. 1–30	1		
Do	Dec. 21–Jan. 31	1		
Johannesburg	Aug. 1–Oct. 31	12		Nov. 1–30, 1918: Cases, 4.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1–30	1		
Austria-Hungary:				
Hungary	Sept. 2–8	2		Sept. 9–Nov. 3, 1918: Cases, 96; deaths, 8.
Budapest	Sept. 9–Nov. 3	59	2	
Pressburg	do	11	1	
Brazil:				
Ceara	Sept. 14–21	1		
Rio de Janeiro	Dec. 15–22	2		
Do	Dec. 29–Feb. 15	28	3	
São Paulo	Jan. 13–19	3		
Bulgaria:				
Asteven	Mar. 10			Present.
Rustchuk	do			Do.
China:				
Antung	Dec. 2–15	2		
Do	Jan. 6–12		1	
Do	Feb. 24–Mar. 2	1		
Chosen (Korea):				
Seoul	Jan. 1–31	2		
Colombia:				
Barranquilla	Nov. 8–Dec. 28		3	
Do	Jan. 5–Mar. 8	2	3	
Egypt:				
Alexandria	Oct. 14–Dec. 31	85	26	
Do	Jan. 1–Mar. 11	249	69	Confined to one quarter of city and mostly to natives.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 25, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Germany				Oct. 20-Nov. 7, 1918: Cases, 12; deaths, 1.
Breslau	Sept. 29-Oct. 19	12	8	
Gumbinnen district	Oct. 20-Nov. 7	1		
Dresden	do	1		
Griefswald	do	1		
Godullahutte	do	1		
Koenigsberg	Sept. 29-Oct. 19	3	1	
Koenigshutte	Oct. 20-Nov. 7	1	1	
Magdeburg	do	2		
Mostelten	Sept. 29-Oct. 19	7	2	District of Allenstein.
Oppeln district	Oct. 20-Nov. 7	5		
Great Britain:				
Cork	Feb. 2-22	4		
Glasgow	Dec. 22-28	5		
Do	Jan. 5-Feb. 8	9	1	
Do	Mar. 9-15	1		
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-Feb. 15		78	
Italy:				
Bari	Feb. 3-9	19		In soldiers returning from Black Sea.
Naples	do	3		Do.
Taranto	do	2		
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-Mar. 16	30	4	
Java:				
East Java				Oct. 7-21, 1918: Cases, 5.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 3.
West Java				Oct. 2-23: Cases, 31; deaths, 6.
Batavia	Oct. 2-23	15	4	
Lithuania				Sept. 1-Oct. 26, 1918: Cases, 539; deaths, 26.
Macedonia:				
Drama	Mar. 17			Present.
Epirus	Mar. 21			Do.
Kavala	Mar. 17	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5-Dec. 27	2		
Do	Dec. 28-Jan. 10	3		
Mexico:				
Aguascalinetes	Feb. 2-23		3	
Do	Mar. 24-30		1	
Guadalajara	Nov. 1-Dec. 31	4	1	
Do	Jan. 1-Feb. 28	2	1	
Mexico City	Sept. 22-Dec. 28	434		
Do	Dec. 29-Mar. 22	256		
Netherlands:				
Amsterdam	Dec. 8-14	1		
Do	Jan. 12-18	4		
Delft	Feb. 26			Present.
Harlem	do			Do.
Leiden	do			Do.
Limburg	do	5	1	Mining district.
Rotterdam	Feb. 2-Mar. 1	384	71	Jan. 30-Feb. 27, 1919: Cases, 462; deaths, 46.
Schiedam	Feb. 26			Present.
Poland				Sept. 29-Oct. 26, 1918: Cases, 572; deaths, 50.
Lods	Sept. 29-Oct. 26	55	8	
Warsaw	do	111	13	
Portugal:				
Braga	Mar. 24			Epidemic.
Oporto	Mar. 8-15	184		
Russia:				
Archangel	Jan. 15-Feb. 1	35	10	
Serbia				Apr. 5, 1919: Reported to be spreading.
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 30	43		
Do	Jan. 17-Feb. 28	73	9	
Ukraine				Apr. 5, 1919: Reported to be spreading.
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to Apr. 25, 1919—Continued.

YELLOW FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Pernambuco	Oct. 1-Nov. 30	2	1	
Colombia:				
Cartagena	Jan 29-Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1-30	1		
Catarama	Feb. 1-15	1		
Chobo	Jan. 1-15	1		
Daule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-Feb. 28	4	1	
Guayaquil	July 1-Dec. 31	328	177	
Do	Jan. 1-Feb. 28	114	59	
Hacienda Vainilla	Feb. 16-28	1		
Milagro	Nov. 1-15	1		
Do	Feb. 1-15	1		
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-Feb. 28	2	2	
Pavo (Hacienda)	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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PUBLIC HEALTH REPORTS

VOL. 34 MAY 9, 1919 No. 19

ANTHRAX AND THE STERILIZATION OF SHAVING BRUSHES.

Because of continued occurrence of cases of anthrax due to infected shaving brushes, the Public Health Service has issued a circular letter of warning to State and local health authorities and others concerned.

Attention is also called to the report on page 994 on an investigation of the shaving-brush industry with special reference to anthrax. This investigation was conducted by the United States Public Health Service in 1918.

The circular letter of warning follows:

To State and local health authorities and others concerned:

The continued occurrence of cases of anthrax due to infected shaving brushes leads this bureau to believe that the suggestion contained in Bureau Circular Letter No. 136, dated July 31, 1918, recommending the sterilization of all brushes in trade channels, is not being complied with. Attention is therefore again called to the fact that there are still undoubtedly in trade channels shaving brushes made from material contaminated with anthrax.

Any brushes found in the market which do not bear the name or the trade-mark of the manufacturer should be regarded with suspicion, and should be returned to the source from which they were secured, or should be disinfected.

For the sterilization of brushes the following procedure is believed to be effective:

The brush should be soaked for four hours in a 10 per cent solution of formalin (by formalin is meant a 40 per cent solution of formaldehyde). The solution should be kept at a temperature of 110° F. and the brush so agitated as to bring the solution into contact with all hair or bristles.

I shall be obliged to you for bringing this information to the attention of all those interested.

Respectfully,

RUPERT BLUE,
Surgeon General.

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AN INVESTIGATION OF THE SHAVING-BRUSH INDUSTRY, WITH SPECIAL REFERENCE TO ANTHRAX.

Through Col. F. F. Russell, in charge of the Laboratory Division of the Office of the Surgeon General, United States Army, reports were received of the occurrence of anthrax among soldiers. The lesions appeared on the face, and suspicion was at once directed to shaving brushes, as there had been similar outbreaks among the British military forces, which had been traced to shaving brushes. Later, several cases of facial anthrax, undoubtedly due to shaving-brush infection, were detected among the civilian population. No cases have been reported from the Navy.

Shaving brushes used in the United States are, with unimportant exceptions, made from badger hair, horsehair, or pig's bristles. With the Russian market closed the quantity of badger hair used is negligible. The large majority of the so-called badger-hair brushes now on the market are really clever imitations made by treating white hair or bristles by secret processes.

Until the war disturbed the usual commercial channels, all or nearly all of the horsehair and pig bristles used in the United States came from Russia, China, or Japan, after having been submitted to cleaning or disinfecting processes in France or Germany. When the war started in 1914 the material began to come direct to the United States via the Pacific route. Through ignorance of the danger, or through an unwarranted confidence in certificates of disinfection that accompanied the importations, some American brush manufacturers took no pains to insure the safety of the material going into their products, though suspicion as to the safety of imported horsehair was rather general among importers and dealers.

Horsehair, which is the most frequent source of shaving-brush anthrax infection, is of both foreign and domestic origin. The largest part of that used in the manufacture of shaving brushes comes from Oriental sources—China and Siberia furnishing by far the greater portion. This imported hair is notoriously dirty, and likely to be anthrax infected. It reaches this country in wooden cases which hold usually about 125 pounds. The hair is put up in bundles known to the trade as "drafts." The drafts vary in length from about 3 or 4 inches to perhaps 15 inches, and in diameter from less than 2 inches to about 3.

These drafts are always said to have been cleaned and disinfected, but they bear no indication as to the manner or methods of treatment, and results of their use have shown that the methods employed are inadequate to sterilize the hair.

Horsehair put up by domestic dealers comes chiefly from the Argentine or is collected by hair dealers locally, principally in Chicago.

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The hair is washed with soap or lye, and often with warm water, but it is not submitted to any process which may be regarded as making it safe from the anthrax viewpoint. A number of these hair-dressing establishments have been visited, the various processes seen in operation, and it is certain that they do not afford a guarantee of safety.

At present the only pig bristles coming into the American market are what are called "China" bristles. They all come from the Orient, but they do not all necessarily originate in China. These bristles are said to have been boiled before shipment from the countries in which they are prepared, but there is no assurance that this has been done. On the other hand there is no direct evidence associating them with any of the cases of anthrax due to shaving brushes.

The pig bristles come in bundles ranging from 1 to 4 inches in length and usually about 1½ inches in diameter. The manufacturer of brushes buys his hair or bristles direct from importers or through a broker or wholesaler.

The manufacture of shaving brushes is confined to about 20 establishments in the United States. The only point in the process of manufacture that needs to be mentioned is that bearing on the safety of the product. It was found that some establishments made no pretense of sterilizing hair or bristles, while others conducted the process in a very thorough manner. There were all grades between these extremes.

The treatments employed were, briefly, boiling for periods varying from half an hour up to 9 or 10 hours; steaming in streaming steam for from 1 to 8 hours; treatment in an autoclave for from 15 minutes to 3 hours; subjecting to dry heat for varying periods up to a total of 24 hours. In one establishment, in addition to boiling, the material was soaked in alcohol. The boiling was done in metal containers over a free gas flame, or by leading steam into a tank or kettle of water, or by means of coils of steam pipe carried through a tank.

After a careful survey of the industry and the performance of a few tests under conditions approaching those in manufacturing establishments it was decided that either boiling or steaming afforded a satisfactory means of treating the hair.

Thermometric tests were made and it was found that when the drafts were immersed in boiling water or exposed to steam the temperature in the center of the bundles rose rapidly, reaching that of the fluid or vapor within a few minutes.

A number of shaving brushes were secured in the open market and submitted to bacteriological examination. Some were found to be anthrax-infected, but they could not be traced to any particular manufacturer, as neither the brush nor the package in which it came bore any mark to indicate its origin. Without doubt there are now in the market many brushes which are potentially dangerous.

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INFLUENZA AT SAN QUENTIN PRISON, CALIFORNIA.

By L. L. STANLEY, M. D., Resident Physician.

The California State Prison at San Quentin was visited in 1918 by three distinct epidemics of influenza—the first in April, the second in October, and the third in November. These epidemics were similar to the widespread visitations of the respiratory disease which has attacked the inhabitants of almost every part of the world during the year.

The first epidemic began on the 13th of April with the entrance into the institution of a prisoner who had come from the county jail in Los Angeles, where, he stated, a number of other inmates had been ill. This man himself had been sick before he came here, having had pains over his body accompanied by fever. On his entrance to this prison he mingled with the 1,900 men who were congregated in the yard on Sunday, April 14, ate in the general mess with them, and at night was locked in the receiving room with about 20 other newcomers. His illness returned the following day, or at least was aggravated, for he was admitted to the hospital with a temperature of 101, chills, and an aching sensation in the back and bones.

From this time on until May 26 there was an epidemic of unusual severity, with 101 patients admitted to the hospital, of whom 7 developed broncho-pneumonia, and 3 died.

The height of the epidemic was on Tuesday and Wednesday, April 23 and 24, on which days 8 and 16 new cases, respectively, were hospitalized. On these days about one-half of the prison population of 1,900 men was ill. The records show that whereas ordinarily only 150 to 200 men call each day at the hospital for treatment, consultation, and advice, on these days 700 and 750, respectively, appeared. Instead of the usual number of from 3 to 7 being excused from work on account of sickness, at this time there were from 25 to 62. All of these men excused from their ordinary tasks were quite ill, having temperatures ranging from 100 to 101, with pains in the back and severe prostration. They should have been placed in the hospital, but it was impossible to put them there on account of lack of facilities. They were allowed to stay in the open air and were not permitted to go to their cells until evening, because it was believed that this unusual disease might be increased by confinement in stuffy rooms during the day.

Many other prisoners who were obviously sick stayed with their work, and after a few days felt somewhat improved. So many, in fact, were ill, that in the jute mill, tailor shop, furniture factory, and foundry it was almost impossible to keep up operations, and the advisability of a complete shut down was for a time considered.

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The weather at this time was warm and balmy, with much sunshine, and the men who felt ill were allowed to leave the mills for periods to go outside. Many felt too ill to return to work and lay down on the ground in the sunshine.

The epidemic gradually subsided, but it is safe to say that over 500 of the men were ill.

It is a noteworthy fact that the disease reached its height on Tuesdays and Wednesdays of the second and third weeks. An explanation offered for this is that on every Sunday morning two moving-picture shows are held, one at 8 and the other at 10 o'clock. The room in which these shows are given is partly underground, poorly ventilated, artificially lighted, and at both shows tremendously crowded. Here, at one or the other of the shows, almost all of the 1,900 prisoners attend, and before the morning is over the room is moist, warm, and foul with smoke and human odors. Fans have been installed, but they are not efficient. Between the shows little time is allowed for refreshing the atmosphere, one body of prisoners entering as soon as the other leaves. Some prisoners remain for both shows, while others complain of acquiring headaches while there and refrain from attending.

Assuming that this respiratory infection attacked its victims at the shows on Sunday, it would seem that there was an incubation period of from 36 to 60 hours, which produced the sudden illness on the following Tuesday or Wednesday. A typical history of many of the cases is that on Sunday they visited the show, and that on Tuesday or early Wednesday they were seized with headache, fever, chills, bone ache, severe prostration, and sometimes nausea. Chart I (a) shows the incidence of the disease with the apparent Tuesday and Wednesday increase.

Reverting to the incidence of the disease, it seems probable that the epidemic was started and introduced in this prison by the new arrival from Los Angeles, for he was the first one ill, and others became sick shortly after he arrived. Of course, he was closely associated with the other men, and could probably have passed it on by droplet infection.

It was noticeable to members of the hospital staff that many of those who were under treatment for the influenza were also syphilitic, and previous to this had been given considerable mercury and salvarsan. Ten per cent of the 101 cases were afflicted with syphilis. This however, is the normal percentage of luetics among the prisoners as determined by the Wassermann reaction at the time of their entrance.

Chart I (b) shows the age incidence. There were 27 per cent between the ages 20 and 25, and 26 per cent between the ages 25 and 30.

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Seven per cent of the hospital cases developed pneumonia, among which three died. Those who died passed away very quickly, first becoming dyspnœic, cyanotic, and often expelling a thin, sanguineous fluid from the lungs.

In this epidemic 9 per cent of the cases, after two or three days, had a subsidence of all symptoms and were discharged from the hospital, but in about 10 days returned with a recrudescence.

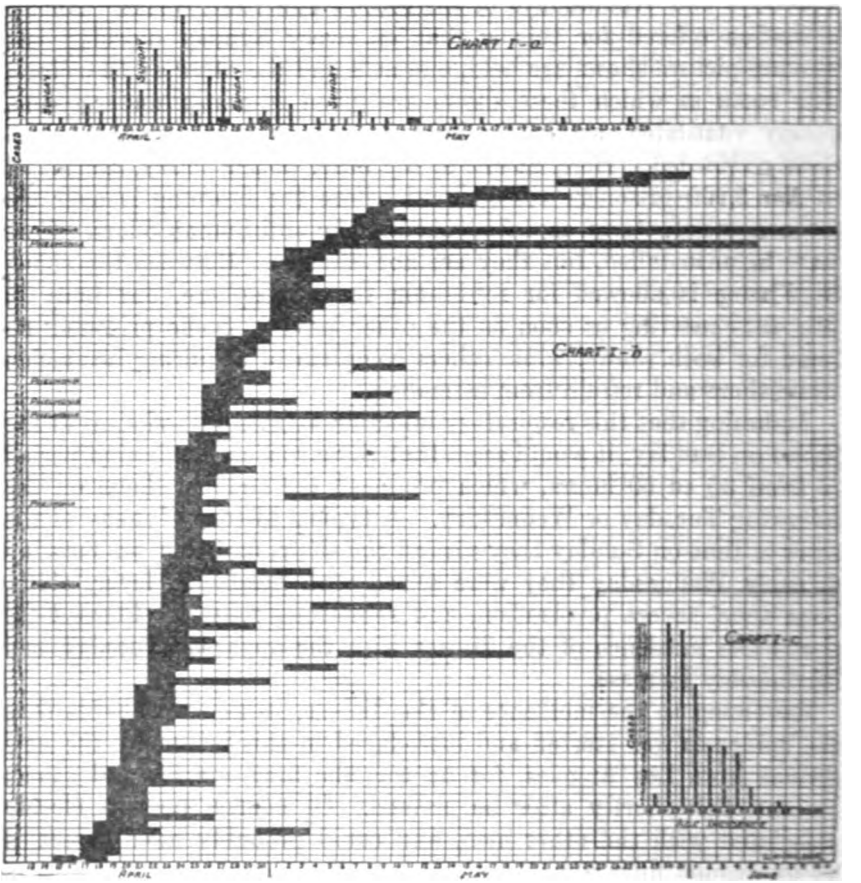

CHART I. – April June epidemic:
a. Morbidity and mortality; solid black rectangle shows mortality.
b. Duration of disease in each case.
c. Age incidence.

All races were attacked by the disease. Eighteen per cent were Mexicans, 6 per cent Negroes, and 3 per cent Chinese.

A number of those attacked by the influenza were probably so weakened that tuberculosis was able to develop in them. One, later, developed tuberculous glands of the neck. Four developed pulmonary tuberculosis, of which one died. One who had tuberculosis

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in a latent state, was attacked, and had, as a result, an active, open phthisis.

A second epidemic broke out in the prison on the 3d of October, when it was probably reintroduced by a new arrival, likewise from the Los Angeles jail. This prisoner stated that one of the deputies who brought him to the penitentiary and who occupied a compartment with him on the night train, had complained of feeling ill, with cough, restlessness, and thirst.

On the day following his arrival at San Quentin, the prisoner became ill and was admitted to the hospital with typical Spanish influenza, which, at that time, was becoming epidemic on the Pacific coast. He had, however, before his admission to the hospital, spent one night in the receiving room where there were 10 other men, had taken his meals with the 1,900 other prisoners, and had been interviewed by many of the old-time prisoners who were anxious to get all the news from the outside of the jail.

The epidemic came on slowly and reached its height on October 21. In all, there were 69 cases with 8 or 12 per cent developing pneumonia, and 2 deaths. Unlike the April attack, there were fewer ambulatory cases, and all who became ill were placed in the hospital and kept there until defervescence and subsidence of symptoms. The disease may be said to have attacked only 3.7 per cent this time, while in the former epidemic about 27 per cent of the entire population was ill.

No Sunday picture show was held on October 20 (Chart II (a)), but instead, there was an open air band concert by the Oakland Municipal Band. This concert was held in the open yard, but the prisoners crowded around the band, and were loud in their cheers. The day following this concert there was an increase in hospital admissions.

On October 22 masks were provided for all the men as well as for the officials and their families.

These masks were made of washed flour sacking, one ply, sewed in the shape of a bag which fitted over the nose and cheeks and up under the chin, and were fastened at the two corners by tape and elastic bands which went behind the head. They resembled in shape the nose bag used for feeding horses. Air, of course, could go through the cloth, and there was considerable air space in the bag, for in no way did the material touch the external nares or the mouth. For several days the men used the masks, but soon discarded them for the most part.

On account of the inconsistent manner in which the masks were worn, it is doubtful if they helped to any appreciable degree the stamping out of the epidemic.

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Toward the end, about 30 of the hospital attendants and a few of the other prisoners were vaccinated with Leary vaccine. With this number the efficacy of the vaccine was indeterminable.

Chart II (c) shows the age incidence. Twenty of the 69—29 per cent—were between the ages 20 and 25. There were 17 per cent each between the ages 25 and 30 and 30 and 35.

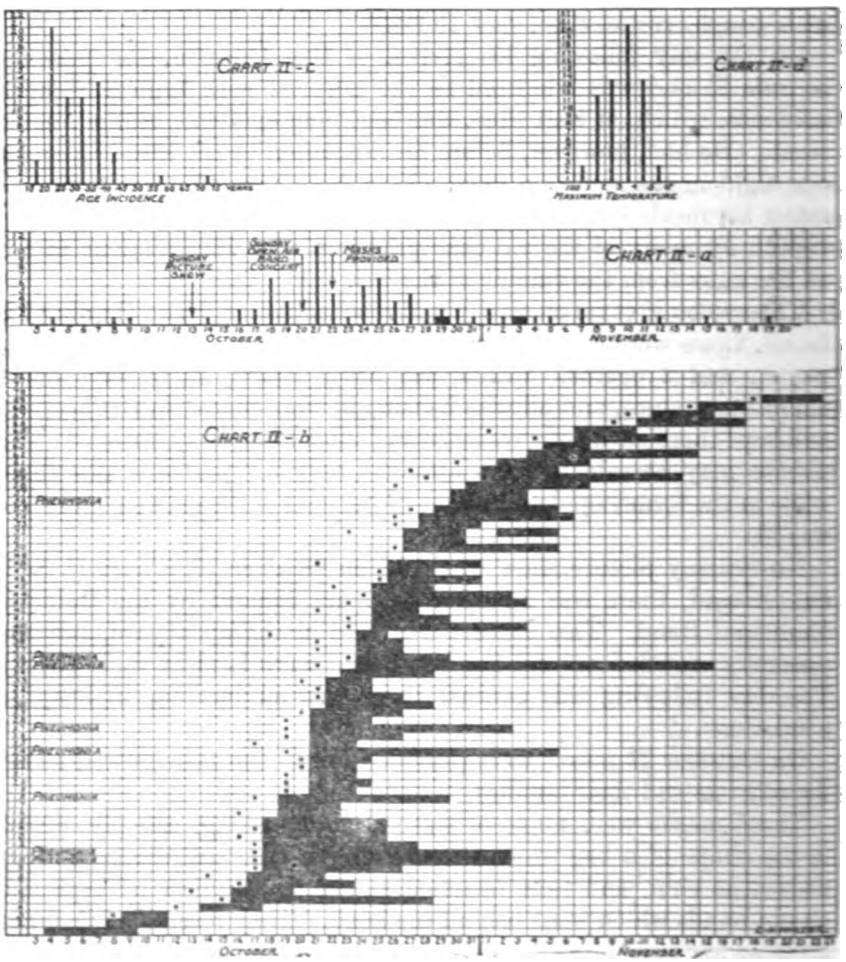

CHART II.—October-November epidemic.

a. Mortality curve; each block represents one death.

b. Duration of disease; each black square shows days in hospital.

c. Age incidence.

d. Maximum temperature.

The temperature in most of the cases was high, the maximum in 29 per cent being between 103° and 104°, as shown in Chart II (d).

Forty-two of the 69 prisoners attacked by the disease had entered prison since the April epidemic; twenty-seven of the 69 had been in

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San Quentin at the time of the April epidemic and, so far as determinable, had not been ill at that time.

The third epidemic began on November 25, the last case of which was admitted on December 4. It covered a period of 9 days, and began 11 days after the end of the October epidemic.

On Sunday, November 24, the picture shows were allowed to be opened after having been closed for over six weeks. Of course, there was a large attendance at both the 8 and 10 o'clock shows.

After this the epidemic broke out very suddenly, and from Tuesday noon, November 26, to Wednesday noon, November 27, there were 24 well-defined cases admitted to the hospital. Other cases appeared as shown in Chart III (a), there being in all 59 cases, with no pneumonias and no deaths. (Three not included on chart; in cells but not hospitalized.)

From noon of the 27th until Thanksgiving morning, November 28, no new cases appeared, but on this holiday three more prisoners became ill. As is usual on Thanksgiving Day, there was a field meet between the various departments of the prison. About 200 prisoners took active part in this meet, while about 1,600 others were spectators, crowded about the side lines. The meet was held in the open air, but the prisoners were closely packed. They cheered and yelled enthusiastically. For the three days following this celebration there were nine, five, and eight patients admitted, respectively.

The sudden flare-up after the apparent obliteration of the disease led to the belief that the disease had been reintroduced and that it had been spread in the Sunday show and during the field meet.

It was found that prisoner A had on Thursday, November 21, arrived by train from Colusa County, where the epidemic was raging, that he became ill the following day but did not report at sick call, and that he had been assigned to the receiving room with 10 or 12 other prisoners. Even though ill, he attended the 8 o'clock Sunday morning show, and was admitted to the hospital that evening with a temperature of 102 and unmistakable signs of influenza.

In this same receiving room were prisoners B and C, who slept in beds adjoining that of A. B stated that A accidentally sneezed and coughed in his face about 4 o'clock Sunday afternoon. At 9 o'clock Tuesday morning B began to have headache, fever, and chills.

C was closely associated with both A and B. He went to the first Sunday show and became ill about the same time that B did.

In these three cases it seems probable that A contracted the disease on the train coming to prison, that he spread it in the show, and infected B and C by close contact in the receiving room.

Working on the belief that the picture show on November 24 was the place where the infection was spread, interesting data on the incubation period were obtained.

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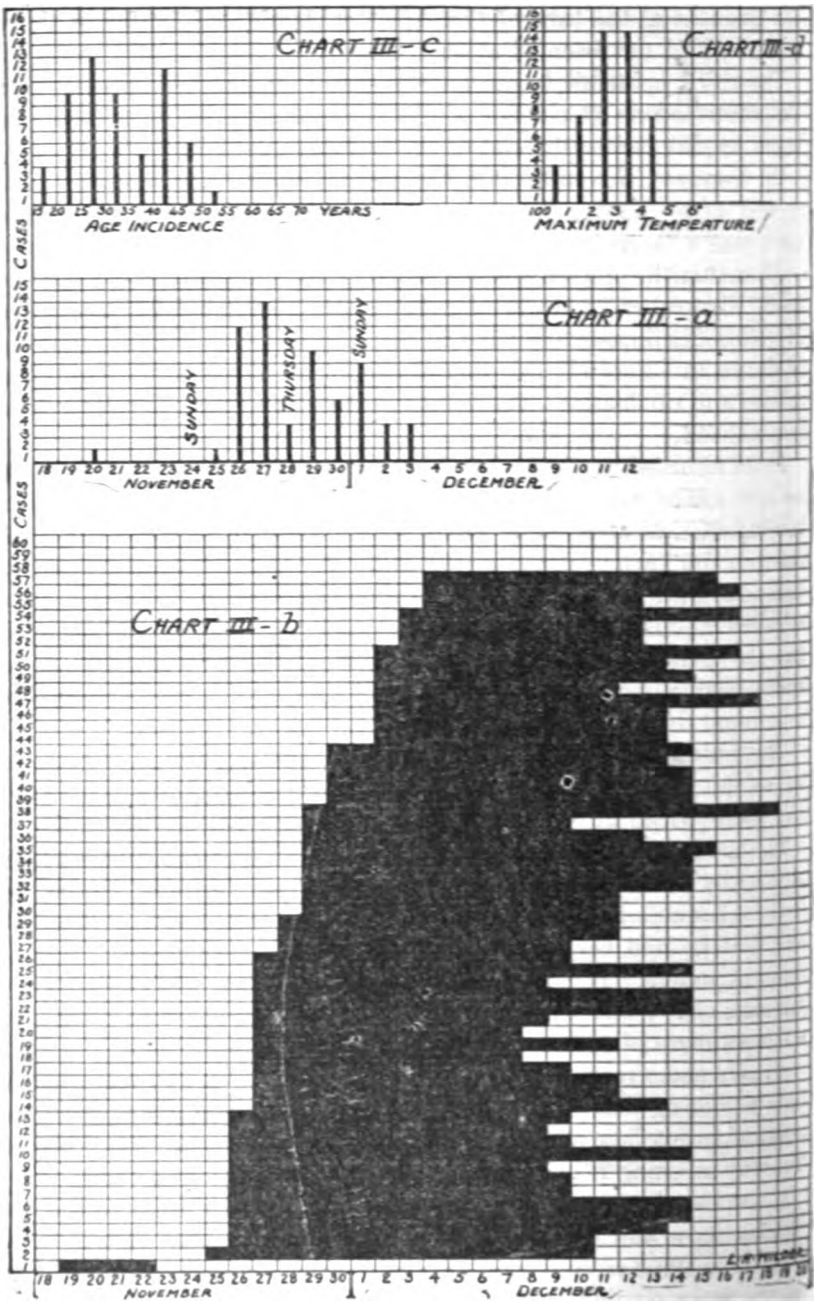

CHART III. November December epidemic:

a. Morbidity chart.

b. Duration of disease in each case; solid black shows days in hospital.

c. Age incidence.

d. Maximum temperature.

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The following table indicates the man's prison number, his theater location number, the show he attended, the day he became ill, and the number of hours elapsing between attendance at show and becoming ill:

Prisoner's number.	Theater location number.	Sunday show attended.	Day became ill.	Hours elapsed.
31852	18	Second	Monday	18
25852	12	do	do	38
29854	4	do	do	38
31981	5	First	Tuesday	45
31889	17	Second	do	44
32102	13	do	do	56
32106	14	First	do	46
26019	9	Second	do	42
29399	8	do	do	52
31330	16	do	Monday	34
31718	15	First	Tuesday	52
32024	25	Second	do	52
31865	23	do	do	48
32023	21	do	Monday	22
31855	22	First	Tuesday	58
31866	19	do	do	50
30795	27	do	Wednesday	76
31660	28	Second	Tuesday	57
25290	29	First and second	Monday	34
29561	34	First	Wednesday	84
31831	35	do	Thursday	90
30880	37	do	do	92
32094	43	do	Wednesday	72
31400	44	do	Tuesday	50
28012	45	do	Thursday	108
27139	44	do	Friday	134
31693	45	do	Saturday	146
27704	48	Second	Friday	125
32041	49	do	Monday	24

From these figures it appears that the period of incubation is about 48 hours. It is probable that those who became ill after Thursday obtained their infection at the Thanksgiving Day field meet, or, secondarily, from some one ill before that time, and not at the show.

In order, if possible, to prove that the picture show was the means of spreading the disease, a ground-floor sketch of the room (Chart IV) was made. This diagram was shown to each of those ill and he was directed to indicate as nearly as possible the relative position he occupied.

The circles indicate those at the first show and the squares those at the second. Although their positions could not be accurately determined, it is seen that there were approximately five foci about which the infected sat. The largest one was in the center of the room, while at each corner, apparently, there was a focus. More were infected at the second show than at the first.

None was infected in the orchestra pit, where there were about 10 men. The pit is about 9 feet in front of the first row of seats.

In this epidemic it has been found that certain groups were attacked. In one room of 18 men where night school is held and the prisoners come in close contact during their studies, 4 were infected.

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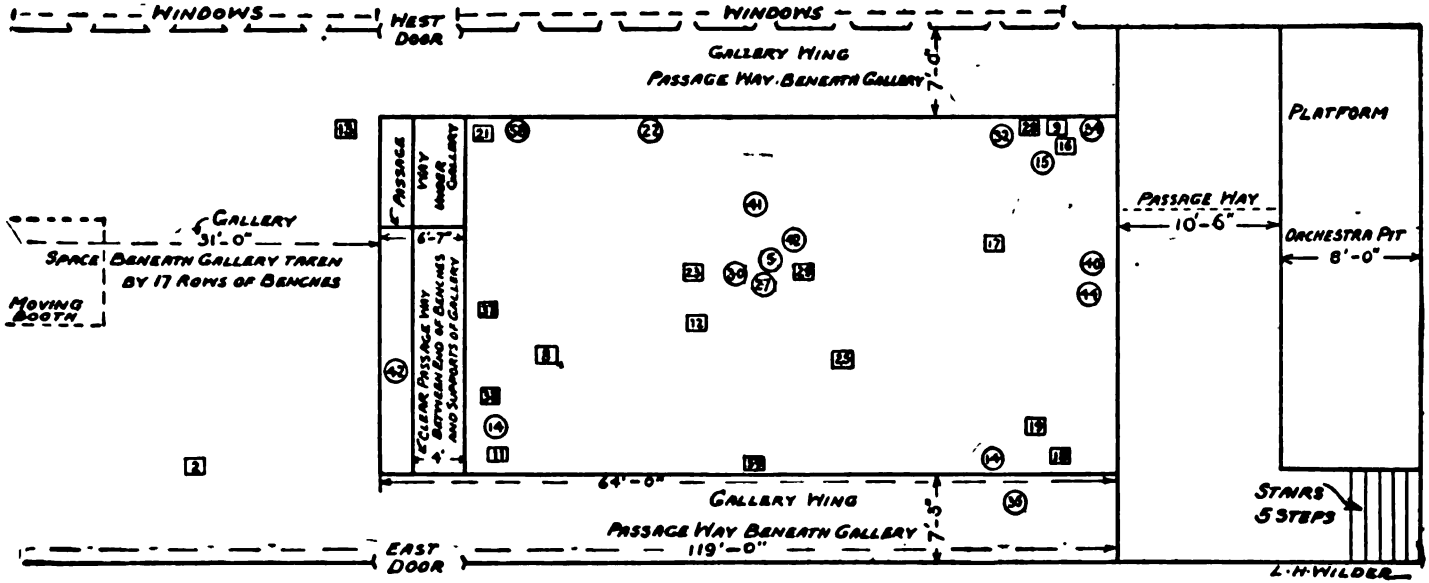

CHART IV.—Grouping of prisoners who became ill with influenza after attending movies, Nov. 24, 1918. Circles represent prisoners at 8 o'clock show; squares, those at 10 o'clock show.

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In another instance, prisoner D became ill Tuesday at 2 o'clock, but did not go to the hospital. That evening, although quite ill, he had occasion to go to the prison vault with the State clerk. Both remained in this close place for 15 minutes, inspecting some records. On the next Thursday at 10 o'clock the State clerk became ill with influenza. This was just 40 hours after the two had been in the vault together.

Another case is that of prisoners E and F. E went to the first show, worked all day Monday, and became ill on Tuesday. Next to his loom in the jute mill was one operated by prisoner F. Both men were in close contact all day Monday. F had not attended the Sunday show, had been in a single cell, but became sick on Tuesday afternoon. Possibly E gave the disease to F while the two were working together in the mill.

All of these instances lead to the belief that the disease is transmitted by close contact.

At this prison there is a woman's department which had, at the time, 30 female inmates. They were in a separate building and did not come in contact with the men at all. None of the women was ill with the Spanish influenza in any of these three epidemics.

Chart III (c) shows the age incidence in this last epidemic, in which 20 per cent were between the ages of 25 and 30, while 18 per cent were between 40 and 45 years. Those of the older ages were attacked more in this wave than in the previous ones.

Chart III (d) shows that the greatest number had maximum temperatures of 102 to 103 degrees.

Of the 58 cases in this epidemic, 26 entered prison before April, and none of them, so far as can be determined, was ill at that time. Thirty-two had arrived since April.

Masks were not used in this last epidemic, since, from the previous experience of the October visitation it was believed they were of little value because the prisoners would not use them. It was considered better to warn the inmates against close contact and congregating in inclosed places. All assemblages were prohibited.

As soon as an inmate reported ill he was immediately placed in the hospital and quarantined. Here he was held for at least 10 days after subsidence of symptoms.

To provide against introduction of the influenza into the prison by possible carriers, it was arranged to place all new arrivals in isolation for at least four days before allowing them to be turned loose in the yard with the other men. It was also arranged that masks should be worn by all prisoners who had receptions with friends or relatives. At these receptions the visitor sits at a narrow table opposite the prisoner. It was believed that masks would prevent a possible carrier from infecting the prisoner.

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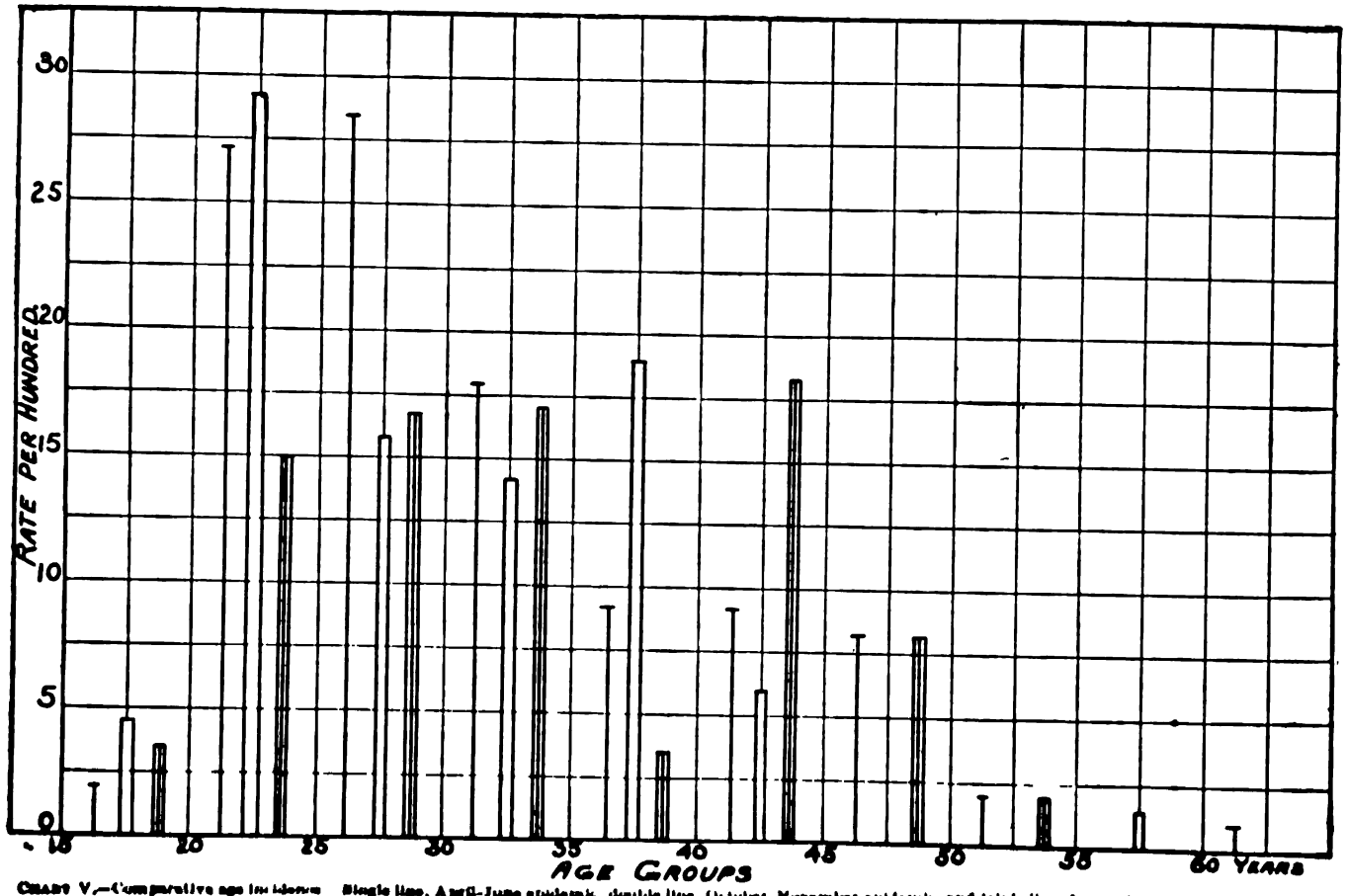

CHART V.—Comparative age incidence. Single line, April-June epidemic, double line, October-November epidemic; and triple line, November-December epidemic.

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Probably as a result of these precautions there was no return of the epidemic, although surrounding cities had many cases after December.

On Sunday, December 20, after a lapse of one month following the last outbreak, the picture shows were allowed to open again. At these shows it was arranged to have one-half of the men wear six-ply gauze masks and the others to act as controls without this protection. No influenza developed in either group. On Wednesday, December 25, the same experiment was tried with a like result. Several other subsequent shows were in this way tried out with no developments.

During the year all State prisoners were committed to San Quentin. In case they were found to be recidivists, they were sent, in turn, from this place to the California State Prison at Folsom, 100 miles away.

Folsom prison had been free from Spanish influenza until December 23, when prisoner G arrived that evening from San Quentin with a temperature of 102.6 and unmistakable signs of influenza. This prisoner G had been in quarantine at San Quentin for four days, and when he left for Folsom on the morning of December 23 his temperature was normal, and he had no symptoms. An examination of these transfers is always made to prevent such an occurrence.

Two days afterwards, one of the guards who accompanied this prisoner to Folsom became ill, and within two weeks there were over 100 cases there, including the resident physician, the pharmacist, and three nurses. It may be said that at San Quentin during all three epidemics, none of the hospital force, including staff, nurses, and attendants, became ill.

From a study of these three epidemics various conclusions can be fairly definitely drawn:

1. Each epidemic was apparently introduced by a recently infected entrant.

2. Close contact in crowded, poorly ventilated show rooms probably spread the infection.

3. The incubation period is from 48 to 60 hours.

4. The second epidemic was less severe than the first, and the third less severe than the second, as shown by the number diseased, number of pneumonia cases, and number of deaths in each.

5. The infection spread in definite groups by close contact, as shown by its course in the rooms where night school was held.

6. The disease in the first and second epidemics attacked more prisoners between ages 20 to 25, but in the third, more between the ages 25 and 30 as well as 40 to 45 became ill.

7. The most effective means available for combating the spread of the disease in this prison were hospitalization, quarantine, isolation, and closure of congregating places.

8. From the first epidemic it is seen that 5 per cent developed tuberculosis.

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9. It appears that those men who entered prison after the April epidemic were attacked in greater numbers than those who had come before, although there were more of the latter than the former.

INFLUENZA AMONG AMERICAN INDIANS.

The following is a summary tabulation of cases (as reported) and of deaths from influenza among American Indians during the period October 1, 1918, to March 31, 1919, the data having been furnished through the courtesy of the Office of Indian Affairs, Department of the Interior:

Number of cases of influenza reported and of deaths from influenza among American Indians during the period Oct. 1, 1918–Mar. 31, 1919, by States and geographic divisions: Indicated morbidity rate and case fatality rates and mortality rates.

Geographic division and State.	Population.	Number of cases.	Number of deaths.	Indicated case rate per 100.	Death rate per 1,000.	Indicated case fatality rate per 100.
ATLANTIC STATES.						
New York	5,982	800	80	13	13.4	10
Florida	595	66	10	11	17.1	15
North Carolina	2,343	781	37	33	15.8	5
Total	8,910	1,647	127	18	14.3	8
CENTRAL STATES.						
Michigan	1,097	50	2	5	1.8	4
Wisconsin	9,006	2,557	156	28	16.3	6
Kansas	2,275	890	20	38	8.8	2
Nebraska	2,834	861	60	30	21.1	7
North Dakota	9,216	2,349	120	25	13.0	5
South Dakota	23,880	8,559	755	36	31.6	9
Minnesota	5,702	1,633	85	28	14.7	5
Oklahoma	118,227	15,217	861	13	7.3	6
Iowa	358	125	9	35	25.0	7
Total	173,383	32,211	2,068	19	11.9	6
MOUNTAIN STATES.						
Arizona	45,707	17,237	1,948	38	4.3	11
Colorado	1,222	399	59	33	48.3	13
Idaho	4,208	634	72	15	17.1	11
Montana	12,079	2,037	138	17	11.4	7
Nevada	2,854	964	49	34	17.2	5
New Mexico	22,005	10,550	1,214	48	55.2	12
Utah	1,704	448	72	26	42.6	16
Wyoming	1,049	16	1	1	.6	6
Total	91,475	32,285	3,553	35	38.9	11
PACIFIC STATES.						
California	16,416	4,398	256	27	15.6	6
Oregon	4,355	1,097	94	25	21.6	9
Washington	10,315	2,013	172	20	16.7	9
Total	31,086	7,508	522	24	16.8	7
Grand total	304,854	73,651	6,270	24	20.6	9

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The period for which the foregoing statistics are given covers the first epidemic period. It was pointed out by the Office of Indian Affairs that a second epidemic invasion occurred in certain localities after April 1, 1919, but the statistics of this second epidemic are not yet available.

The morbidity statistics probably are not complete, but taking into consideration the governmental supervision of Indian affairs, greater dependence may be placed upon these morbidity reports than upon those received through the usual channels. However, the case rate and the case fatality rate have been designated in the table given above as "indicated rates." Even were the morbidity reports complete for the Indian population, the lack of complete morbidity reports in other localities and for other races in the United States renders impossible any comparison of incidence or case fatality between Indians and other races or the general population.

The mortality rates, however, show that the epidemic was extremely severe among the American Indians. During the six months period from October 1, 1918, to March 31, 1919, over 2 per cent of the Indian population died of influenza. The mortality among Indians in the Mountain States, especially in Colorado, Utah, and New Mexico, was very high. For the Indian population as a whole, the annual mortality rate from influenza alone during the six months period was 41.2 per 1,000, which is far above that for the general population—roughly about four times as high as that for the larger cities in the United States during the same epidemic period.

"THE ROAD TO HEALTH."

Even while the war was claiming thousands of lives on the European battle fields, hundreds of thousands of lives were lost right here at home because of preventable diseases. The war is over. We have won the fight for democracy, but we have yet to win the fight against this more insidious, more permanent, and, in the aggregate, more direct foe of mankind—disease.

The above paragraph introduces a popular health leaflet entitled "The Road to Health," recently issued by the United States Public Health Service. It deals with prevention of sickness, correction of physical defects, and rules of hygiene, and contains some excellent suggestions and advice in concise form.

This pamphlet may be obtained free of charge by addressing the United States Public Health Service, Washington, D. C.

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DISCHARGED SOLDIERS URGED TO HELP IN SANITATION.

Through the courtesy of Brig. Gen. Munson, Chief of the Morale Branch, General Staff, we are able to reproduce an instructive poster issued by that office dealing with community sanitation. This

admirably supplements an hour's instruction on personal and general hygiene which each soldier receives just prior to discharge and encourages him to apply the principles of hygiene and sanitation learned in the Army to an improvement of conditions in his home community.

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SOME SUGGESTED VENEREAL DISEASE ORDINANCES.

While a large part of the administrative efforts to control venereal diseases consists in educating the people concerning the nature of these diseases and their influence on the health and welfare of mankind, restrictive public measures also play an important rôle.

The campaign waged in this country against the venereal diseases has already been carried on sufficiently long to indicate the desirability of a number of legislative enactments having to do with the reporting of cases of venereal disease, the detention of certain types of venereally infected, the control of prostitution, the traffic in patent nostrums for the cure of venereal diseases, and the like. Based on this experience and on general epidemiological principles the Public Health Service, through its Division of Venereal Diseases, has just prepared a compilation of suggested ordinances which have proved successful in combating venereal diseases.[1]

These measures are recommended for municipal enactment with the suggestion that in every case they be examined by competent local counsel for changes in form, or in substance if necessary, as may be dictated by special constitutional, legislative, or charter considerations.

It is manifestly impossible to prepare forms of ordinances which will, in the original wordings, exactly fit the varying local requirements. The purpose of the several ordinances contained in this pamphlet is only to suggest in substance desirable and effective legislation. Changes in titles, enacting clauses, penalty provisions, and other formal or administrative details may be found necessary.

It is presumed that every city has general legislation prohibiting prostitution, pandering, and the keeping of disorderly houses, and the suggested measures are supplemental to such general legislation.

Each of these suggested ordinances has been in successful operation in some city and has been found effective in its particular phase of the general fight to prevent the spread of venereal diseases.

Therefore, it is further suggested that alterations of text be confined as much as possible to purely formal considerations.

Persons interested in such legislation or ordinances may obtain copies of this bulletin by addressing the United States Public Health Service, Washington, D. C.

[1] Venereal Disease Ordinances. V. D. Bulletin No. 39. Government Printing Office, Washington, D. C.

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Albany, N. Y.	112,565	36	16.7	C 20.4	11	5.1
Atlanta, Ga.	201,732	44	11.4	C 18.4		2.6
Baltimore, Md.	[2]689,981	233	18.1	A 20.2	34	2.1
Boston, Mass.	785,245	246	16.3	A 17.8	31	2.2
Buffalo, N. Y.	473,229	144	15.9	C 18.5	20	2.3
Cambridge, Mass.	111,432	27	12.6	A 13.8	5	1.6
Chicago, Ill.	2,593,681	622	12.5	A 15.5	81	1.6
Cincinnati, Ohio.	418,022	127	15.8	C 17.1	13	2.9
Cleveland, Ohio.	810,306	203	13.1	C 16.9	45	2.1
Columbus, Ohio.	225,296	68	15.7	C 16.9	9	2.5
Dayton, Ohio.	139,655	25	10.0	C 19.2	7	
Denver, Colo.		68				2.0
Fall River, Mass.	128,392	28	11.4	C 18.7	5	
Grand Rapids, Mich.	135,450	41	15.8	C 20.8		
Indianapolis, Ind.	289,577	76	13.7	C 25.2		
Jersey City, N. J.	318,770	92	15.0	C 14.2		3.0
Kansas City, Mo.	313,785	93	15.5	C 20.4	18	0.6
Los Angeles, Calif.	568,495	131	12.0	A 13.9	7	1.5
Louisville, Ky.	242,707	74	15.9	C 27.3	7	2.9
Lowell, Mass.	100,081	41	19.6	A 18.7	6	1.7
Memphis, Tenn.	151,759	41	13.8	C 20.2	5	1.7
Milwaukee, Wis.	453,481	129	14.8	A 13.3	32	
Minneapolis, Minn.	383,442	102	13.9	C 16.2	5	2.2
Nashville, Tenn.	119,215	39	17.1	C 32.8		
Newark, N. J.	428,684	100	12.2	C 19.5		
New Haven, Conn.	154,865	36	12.1	C 12.5		
New Orleans, La.	382,273	123	16.8	A 18.9	274	1.7
New York, N. Y.	5,215,879	1,489	14.9	C 16.0		
Oakland, Calif.	214,206	46	11.2	A 10.5	94	2.8
Philadelphia, Pa.	1,761,371	527	15.6	[3]16.7	48	4.2
Pittsburgh, Pa.	593,303	177	15.6	C 26.1	11	
Portland, Oreg.		61			10	2.0
Providence, R. I.	263,613	61	12.1	C 17.6	7	2.3
Richmond, Va.	169,719	44	14.3	C 20.4	17	3.3
Rochester, N. Y.	261,856	84	16.5	C 14.2	37	2.5
St. Louis, Mo.	779,951	192	12.8	C 19.3		
St. Paul, Minn.	257,699	63	12.7	C 12.9	29	2.2
San Francisco, Calif.	478,580	144	15.7	C 15.7	25	
Seattle, Wash.		96				
Spokane, Wash.		18			3	1.0
Syracuse, N. Y.	181,404	34	11.0	C 20.7	16	3.2
Toledo, Ohio.	262,234	70	13.9	A 15.7	10	1.3
Washington, D. C.	401,681	127	16.5	A 17.2		
Worcester, Mass.	173,650	54	16.2	C 18.0		

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.

[2] Population estimated as of July 1, 1919.

[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED MAY 3.

CAMP DIX ZONE, N. J.

No case of communicable disease reported.

FAYETTEVILLE SANITARY DISTRICT, N. C.

	Cases.
Chicken pox	1
Gonorrhea	2
Influenza	1
Measles	2
Syphilis	3

CAMP FUNSTON ZONE, KANS.

	Cases.
Chicken pox:	
Manhattan	12
Diphtheria:	
Manhattan	1
Ogden	1
Scarlet fever:	
Junction City	1
Ogden	2
Smallpox:	
Manhattan	1

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

	Cases.
Girard:	
Syphilis	1
Whooping cough	1
Columbus:	
Gonorrhea	1
Measles	1
Mumps	1
Pellagra	1
Pneumonia	6
Smallpox	2
Syphilis	1
Tuberculosis	2
Whooping cough	11
Muscogee County:	
Influenza	1
Pneumonia	1

CAMP GORDON ZONE, GA.

	Cases.
Atlanta:	
Cerebrospinal meningitis	1
Chicken pox	7
Gonorrhea	52
Malaria	2
Measles	8
Mumps	4
Scarlet fever	5
Smallpox	40
Syphilis	17
Tuberculosis	3
Typhoid fever	1
Chamblee:	
Smallpox	1

GULFPORT HEALTH DISTRICT, MISS.

	Cases.
Chicken pox:	
Gulfport	1
Howison	3
Diphtheria:	
Biloxi	1
Gonorrhea:	
Pascagoula	1
Hookworm:	
Sellers	1
Influenza:	
Biloxi	2
Moss Point	1
Malaria:	
Eastside	2
Escatawpa	1
Fenton	1
Gulfport	6
Handsboro	1
Kiln	2
Logtown	3
Mississippi City	2
Moss Point	2
Pascagoula	1

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	1

CAMP SHERMAN ZONE, OHIO.

n pox	1
eria	1
ox	1
ulosis, pulmonary	1
t clinic:	
hea	3
s	1

OUTHER FIELD ZONE, GA.

	3

Diphtheria	6
Gonorrhea	13
Malaria	1
Pneumonia	3
Syphilis	7
Tuberculosis	1
Typhoid fever	3

ASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

following data are taken from telegraphic reports received office of the Surgeon General of the United States Army week ended April 25, 1919. Reports from the American tionary Forces are delayed in transmission, and the "current for troops in the American Expeditionary Forces is not the eriod as "current week" for troops in the United States.

	Current week.	Last week.
mission rate per 1,000 (all causes)	521.04	547.00
ops in United States	810.39	872.35
an Expeditionary Forces	420.82	436.18
mission rate per 1,000 (disease only)	462.10	470.98
ops in United States	698.79	736.93
an Expeditionary Forces	380.13	380.39
e per 1,000 on day of report	42.54	44.75
ops in United States [1]	52.95	53.99
an Expeditionary Forces	38.94	41.61
th rate per 1,000 (all causes)	6.84	6.17
ops in United States [1]	8.98	7.22
an Expeditionary Forces	6.10	5.81
th rate per 1,000 (disease only)	4.49	4.48
ops in United States [1]	7.01	6.16
an Expeditionary Forces	3.62	3.91

d death rates among troops in the United States will continue to be relatively high, as the strength of troops in the United States continues to decline from week to week as a result of ion. Well men only are eligible for discharge, while the sick and otherwise disabled are retained r further treatment. The continued influx of sick and wounded (properly chargeable to com- rseas) is another factor tending to increase rates in the United States and to diminish corre- similar rates overseas.

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n Francisco	6
lare County	1
Total	15
s:	
eenwood County—	
Severy (R. D.)	1
ckson County—	
Soldier	1
arion County—	
Marion	2
arshall County—	
Beattie	1

Minnehaha County	
Total	2
Virginia:	
Henrico County—	
Richmond	3
Lee County	2
Loudoun County	1
Shenandoah County	1
Washington County—	
Bristol	1
Wise County	1
Total	9

City Reports for Week Ended Apr. 19, 1919.

Place.	Cases.	Deaths.
, Ohio	1	
more, Md	1	1
ngham, Ala	2	
, Mass	4	3
line, Mass	1	1
e, Pa	1	
a, Mass	1	
o, Ill	1	2
, Tex	1	
n, Ohio	1	1
on, N. J	1	1
n, Nebr	1	1
ngeles, Calif	1	1
, Ga		1
n, Mass	1	

Place.	Cases.	Deaths.
Milwaukee, Wis	1	1
Minneapolis, Minn	1	
Newton, Mass	1	
New York, N. Y	13	8
Norristown, Pa	1	
Philadelphia, Pa	4	1
Providence, R. I	1	
St. Louis, Mo	1	
San Angelo, Tex		1
San Antonio, Tex	3	1
Seattle, Wash	3	
Somerville, Mass	1	
Toledo, Ohio	1	
Wilkes-Barre, Pa	1	

CHANCROID.

Cases Reported in Extra-Cantonment Zones, Week Ended May 3, 1919.

	Cases.
Shoals sanitary district, Ala	4
Pike zone, Ark	1
Camp Travis zone, Tex	1

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DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 3, 1919.

	Cases.		Cases.
Camp Funston zone, Kans.	2	Camp Travis zone, Tex.	1
Gulfport health district, Miss.	1	Camp Upton zone, N. Y.	1
Camp Polk zone, N. C.	1	Wilmington sanitary district, N. C.	6
Camp Sherman zone, Ohio.	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1032.

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 3, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	2	Picric acid plant zone, Ga.	2
Gas and Flame School zone, Ga. and Ala.	1	Camp Pike zone, Ark.	16
Camp Gordon zone, Ga.	52	Camp Polk zone, N. C.	10
Gulfport health district, Miss.	1	Camp Sherman zone, Ohio.	3
Camp Jackson zone, S. C.	32	Camp Travis zone, Tex.	16
Camp Lee zone, Va.	2	Wilmington sanitary district, N. C.	13
Muscle Shoals sanitary district, Ala.	18		

INFLUENZA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 3, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	1	Muscle Shoals sanitary district, Ala.	2
Gas and Flame school zone, Ga. and Ala.	1	Camp Pike zone, Ark.	2
Gulfport health district, Miss.	3	Souther Field zone, Ga.	3
Camp Lewis zone, Wash.	2		

LEPROSY.

San Francisco, Calif., March, 1919.

During March a case of leprosy was reported in San Francisco, Calif., in the person of A. B., male, a native of the Philippine Islands, 24 years of age. The patient, now in the isolation hospital, had lived in the United States five years; three years in San Francisco, and previously in Salinas, Calif. The disease was diagnosed clinically March 1, 1919.

LETHARGIC ENCEPHALITIS.

California and Nebraska, March, 1919.

During March eight cases of lethargic encephalitis were reported in California and one case was reported in Nebraska.

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 3, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga.	2	Camp Pike zone, Ark.	4
Gulfport health district, Miss.	21	Wilmington sanitary district, N. C.	1
Muscle Shoals sanitary district, Ala.	6		

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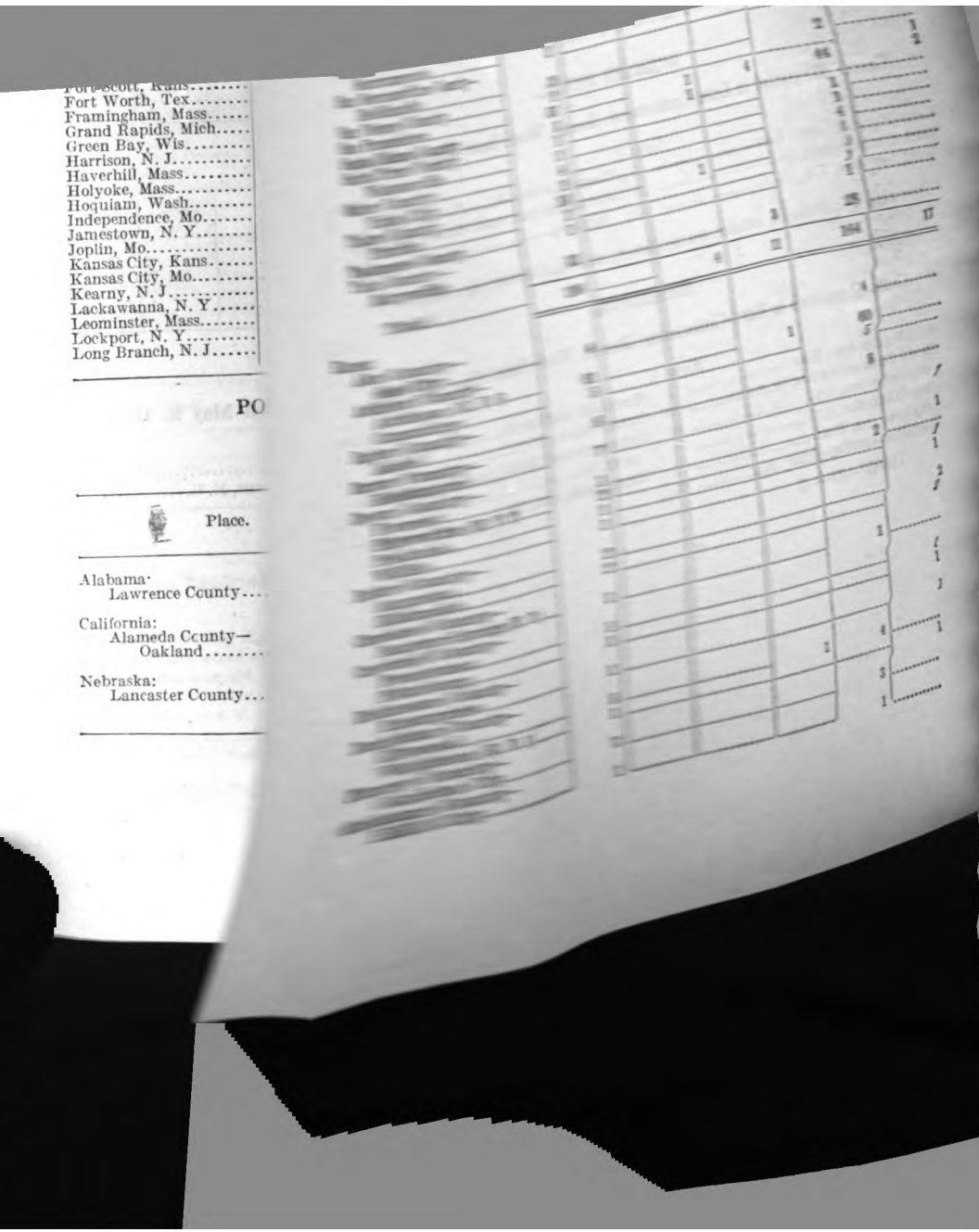
Fort Scott, Kans.....
Fort Worth, Tex.....
Framingham, Mass.....
Grand Rapids, Mich.....
Green Bay, Wis.....
Harrison, N. J.....
Haverhill, Mass.....
Holyoke, Mass.....
Hoquiam, Wash.....
Independence, Mo.....
Jamestown, N. Y.....
Joplin, Mo.....
Kansas City, Kans.....
Kansas City, Mo.....
Kearny, N. J.....
Lackawanna, N. Y.....
Leominster, Mass.....
Lockport, N. Y.....
Long Branch, N. J.....
PO
Place.
Alabama:
Lawrence County....
California:
Alameda County—
Oakland.....
Nebraska:
Lancaster County...
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Knox County	1
Douglas County	
Dodge County	8
Total	3
Oregon:	
Portland	1
South Dakota:	
Codington County	2
Virginia:	
Accomac County	1
Alexandria County—	
Alexandria	2
Alleghany County	1
Clifton Forge	
Lowmoor	1
Augusta County—	
Greenville	
Wise County—	3
Inman	2
Norton	1
Pardee	2
Wythe County—	1
Wytheville	
York County	43
Total	

City Reports for Week Ended Apr. 19, 1919.

Place.	Cases.	Deaths.
Baltimore, Md	2	
Battle Creek, Mich	1	
Beaumont, Tex	1	
Beaver Falls, Pa	1	
Bedford, Ind	5	
Birmingham, Ala	3	
Boise, Idaho	1	
Boston, Mass	3	1
Buffalo, N. Y		1
Cambridge, Mass	1	
Carlisle, Pa	3	
Chicago, Ill	1	
Cincinnati, Ohio	1	1
Covington, Ky	1	
Decatur, Ill	4	1
Detroit, Mich		1
East Chicago, Ind	1	
Elizabeth, N. J	1	
Fall River, Mass	1	
Galveston, Tex	1	
Greensburg, Pa	1	
Hammond, Ind	1	
Harrisburg, Pa	2	
Haverhill, Mass	1	1
Ironton, Ohio	1	
Lawrence, Mass	1	
Los Angeles, Calif		
Louisville, Ky		
Memphis, Tenn	14	5
Methuen, Mass	1	
Milwaukee, Wis	1	1
Missoula, Mont	1	
Mobile, Ala	1	
Monessen, Pa	2	2
Nashville, Tenn	1	
Natick, Mass	1	
New Castle, Pa	1	1
New Orleans, La	9	1
New York, N. Y	1	
Norristown, Pa	9	3
Philadelphia, Pa	1	
Quincy, Mass	1	
Raleigh, N. C	1	
Reading, Pa		1
Rockford, Ill		1
St. Louis, Mo	2	
St. Paul, Minn	2	
San Antonio, Tex	1	
Sandusky, Ohio	2	
Springfield, Ill	1	
Toledo, Ohio	1	
Trenton, N. J	1	
Washington, D. C	1	1
Wichita, Kans	2	
Wilmington, Del	1	
Yonkers, N. Y		

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Allentown, Pa.	65,109	.....	4	.....	23	.....	.....	.....	2	.....
Alliance, Ohio	19,581	7	.....	.....	.....	.....	.....	.....	.....	1
Alton, Ill.	23,783	7	.....	.....	.....	.....	.....	1	.....	.....
Altoona, Pa.	59,712	.....	6	.....	.....	.....	2	.....	1	.....
Anderson, Ind.	24,230	8	.....	.....	.....	.....	.....	.....	.....	2
Ann Arbor, Mich.	15,041	11	1	.....	1	.....	.....	.....	.....	.....
Ansonia, Conn.	16,954	2	.....	.....	1	.....	1	.....	2	.....
Appleton, Wis.	18,005	1	.....	.....	.....	.....	.....	.....	.....	1
Arlington, Mass.	13,073	11	.....	.....	.....	.....	.....	.....	.....	.....
Asbury Park, N. J.	14,629	4	1	.....	1	.....	1	.....	.....	.....
Ashtabula, Ohio	22,008	5	.....	.....	.....	.....	.....	.....	.....	1
Atchison, Kans.	16,785	.....	.....	.....	.....	.....	5	.....	.....	.....
Atlanta, Ga.	196,144	46	2	1	5	.....	6	.....	2	5
Atlantic City, N. J.	59,515	12	.....	.....	.....	.....	.....	.....	.....	.....
Attleboro, Mass.	19,776	6	.....	.....	1	.....	.....	.....	1	1
Baltimore, Md.	594,637	178	35	2	29	1	172	4	57	25
Bangor, Me.	26,958	.....	.....	.....	.....	.....	1	.....	.....	.....
Barre, Vt.	12,401	2	.....	.....	.....	.....	.....	.....	.....	.....
Baton Rouge, La.	17,544	5	1	.....	2	.....	.....	.....	2	1
Battle Creek, Mich.	30,159	.....	6	1	33	.....	1	.....	.....	.....
Bayonne, N. J.	72,204	.....	6	.....	1	.....	2	.....	4	.....
Beatrice, Nebr.	10,437	4	.....	.....	.....	.....	.....	.....	.....	.....
Beaumont, Tex.	28,851	9	.....	.....	.....	.....	.....	.....	.....	.....
Bedford, Ind.	10,613	1	.....	.....	.....	.....	.....	.....	.....	.....
Bellaire, Ohio	14,575	3	.....	.....	.....	.....	1	.....	1	.....
Belleville, N. J.	12,797	.....	1	.....	.....	.....	.....	.....	.....	.....
Beloit, Wis.	18,547	2	.....	.....	1	.....	.....	.....	.....	.....
Benton Harbor, Mich.	11,099	4	1	.....	1	.....	.....	.....	.....	.....
Berkeley, Calif.	60,427	.....	1	.....	.....	.....	1	.....	.....	1
Berlin, N. H.	13,892	2	.....	.....	.....	.....	.....	.....	.....	.....
Bethlehem, Pa.	14,353	.....	.....	.....	3	.....	4	.....	.....	.....
Beverly, Mass.	22,128	7	.....	.....	.....	.....	.....	.....	1	.....
Biddeford, Me.	17,760	4	.....	.....	.....	.....	.....	.....	.....	1
Billings, Mont.	15,123	.....	1	.....	.....	.....	2	.....	.....	.....
Binghamton, N. Y.	54,864	7	.....	.....	1	.....	2	.....	.....	.....
Birmingham, Ala.	189,716	53	2	.....	1	.....	1	.....	4	4
Bloomfield, N. J.	19,013	.....	.....	.....	.....	.....	.....	.....	1	.....
Bluefield, W. Va.	16,123	.....	.....	.....	.....	.....	9	.....	.....	.....
Boise, Idaho	35,951	5	.....	.....	.....	.....	6	.....	.....	.....
Boston, Mass.	767,813	226	30	1	7	.....	44	2	58	24
Brazil, Ind.	10,472	3	.....	.....	.....	.....	1	.....	.....	.....
Bridgeport, Conn.	124,721	48	5	.....	16	.....	4	.....	11	2
Bristol, Conn.	16,318	2	1	.....	.....	.....	1	.....	.....	.....
Brockton, Mass.	69,152	18	2	.....	1	.....	1	.....	1	3
Brookline, Mass.	33,526	11	3	.....	9	.....	.....	.....	2	.....
Brunswick, Ga.	10,984	5	.....	.....	3	.....	.....	.....	.....	.....
Buffalo, N. Y.	475,781	146	62	6	47	1	12	.....	30	13
Burlington, Iowa	25,144	8	1	.....	.....	.....	3	.....	.....	.....
Burlington, Vt.	21,802	8	.....	.....	14	1	1	.....	.....	1
Butler, Pa.	28,677	.....	1	.....	.....	.....	1	.....	3	.....
Butte, Mont.	44,057	.....	.....	.....	.....	.....	8	.....	.....	.....
Cadillac, Mich.	10,158	2	.....	.....	.....	.....	.....	.....	.....	.....

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Phillipsburg, N. J.	15,879	4								
Phoenixville, Pa.	11,871				3					
Pine Bluff, Ark.	17,777		1						1	
Piqua, Ohio	14,275	[2]3								
Pittsburgh, Pa.	586,196		9		15		7		21	
Pittsfield, Mass.	39,678	15					1		2	
Plainfield, N. J.	24,330	6	1		1		2			
Plattsburg, N. Y.	13,111	6							1	
Plymouth, Mass.	14,001	4								
Plymouth, Pa.	19,439				5					
Pontiac, Mich.	18,096	6	2	1			4			
Port Chester, N. Y.	16,727						2		1	
Portland, Me.	64,720	15					10			2
Portland, Oreg.	308,399	61	1		1		11		4	10
Portsmouth, Va.	40,693	14	1		1		1		3	1
Pottsville, Pa.	22,717		1		11		1			
Poughkeepsie, N. Y.	30,786	12					1			1
Providence, R. I.	259,895	60	8		1		7			10
Pueblo, Colo.	56,084						2			
Quincy, Ill.	36,832	9	2				1			
Quincy, Mass.	39,022	18	2						1	2
Racine, Wis.	47,465	12					2		6	1
Rahway, N. J.	10,361	1					2		1	
Raleigh, N. C.	20,274	13							1	1
Reading, Pa.	111,607		1		30					
Reno, Nev.	15,514	6								
Richmond, Va.	158,702	37	2		24		5		6	4
Riverside, Calif.	20,496	4					1			1
Roanoke, Va.	48,282	11	3		39		8		1	1
Rochester, N. Y.	264,714	71	6		11	2	6		15	6
Rockford, Ill.	56,739	16	1		35		3			
Rock Island, Ill.	29,452	8	3							
Rocky Mount, N. C.	12,673	6								
Rome, N. Y.	24,259						2		2	
Rutland, Vt.	15,038	5								
Sacramento, Calif.	68,984				1		1		1	1
Saginaw, Mich.	56,469	31					1			2
St. Joseph, Mo.	86,498	46	1				3			1
St. Louis, Mo.	768,630	216	35	2	61	2	19	1	33	21
St. Paul, Minn.	252,465	52	15	1	81	1	15		14	7
Salem, Mass.	49,346		3	1			7	1	4	3
Salem, Oreg.	21,274	2								
Salt Lake City, Utah	121,623	34			1		2			
San Angelo, Tex.	[1]10,321	4								1
San Antonio, Tex.	128,215		2		1		1		3	4
San Bernardino, Calif.	17,616	5							1	1
San Diego, Calif.	56,412	26	1						1	1
Sandusky, Ohio	20,226	11	1							1
Sanford, Me.	11,217	5								
San Jose, Calif.	39,810				1					

[1] Population Apr. 15, 1910.
[2] Total deaths week ended Mar. 29 were 4 instead of 23 as originally reported. (P. H. R. Apr. 18, p. 815.)

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...on, Pa.	52,296	22										
...envville, Ohio	15,759											
...rton, Calif.	28,259	14	1									
...tor, Ill.	36,209	11	1				1			6		2
...rior, Wis.	14,313	7			1		11	1				
...ense, N. Y.	47,167	9	1				6			2		
...oma, Wash.	158,559	47	5		18		1			1		1
...nton, Mass.	117,448		1		9		1			1		
...e Haute, Ind.	36,610	11	2							9		4
...in, Ohio	67,351	8					10					
...edo, Ohio	12,962	3			30					11		2
...peka, Kans.	202,010	74	4				1			4		2
...nton, N. J.	49,538	16		1	15	1	2					
...oy, N. Y.	113,974	28	3				2			3		
...lsa, Okla.	78,094	29			1							1
...scaloosa, Ala.	32,507		1				1					
...llejo, Calif.	10,824	3								2		1
...ancouver, Wash.	13,803	4	2							42		12
...akefield, Mass.	13,805	5						25				
...altham, Mass.	12,947	9			7					2		3
...ashington, D. C.	31,011		15	2	1		13					
...ashington, Pa.	339,282			1	22	1	1					
...aterbury, Conn.	22,076	5	5									
...atertown, Mass.	89,201	3					2			2		
...ausau, Wis.	15,188	9			1		4			2		
...est Chester, Pa.	19,666											
...estfield, Mass.	13,403	7	5	1	1							1
...est Hoboken, N. J.	18,769	7			1		1			2		1
...est New York, N. J.	44,386	2	2							8		
...est Orange, N. J.	19,613	2	1		1		2					2
...heeling, W. Va.	13,964	18	1							2		
...hite Plains, N. Y.	43,657	6					3					
...ichita, Kans.	23,331	21			34					2		
...ilkes-Barre, Pa.	73,597		2		7					1		
...illiamsport, Pa.	78,334				4		3					
...ilmington, Del.	34,123	21	2		1					1		3
...ilmington, N. C.	95,369	4						1				
...inchester, Mass.	30,400	3										2
...inona, Minn.	10,812	4			37							7
...inston-Salem, N. C.	[1] 18,583	10	1					2		10		
...inthrop, Mass.	33,136	1						1				4
...oburn, Mass.	13,105	7			34			4				
...orcester, Mass.	16,076	56	6					1		1		
...akima, Wash.	166,106				12			2				4
...onkers, N. Y.	22,058	22	5							1		5
...ork, Pa.	103,066			1	83	1						
...oungstown, Ohio	52,770	39	5		4							
...anesville, Ohio	112,282	17										
	31,320											

[1] Population Apr. 15, 1910.

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cases of the disease were stated to exist in two civil and two military prisons at Marseille.

INDIA.

Influenza—Delhi and Rural Areas—October-November, 1918.

According to information dated May 3, 1919, relative to influenza at Delhi, India, during the months of October and November, 1918, 13,190 cases were treated at dispensaries; 7,044 deaths were reported; in rural districts, 16,131 deaths were reported.

MADAGASCAR.

Influenza—Diego Suarez—Ste. Marie.

Epidemic influenza was reported present at Diego Suarez and Ste. Marie, Island of Madagascar, April 29, 1919.

NETHERLANDS.

Influenza Mortality—Year, 1918.

Reports of influenza mortality in the Netherlands for the year 1918 show the occurrence of 17,744 fatal cases of influenza distributed by provinces as follows:

Province.	Deaths.	Population, preliminary estimate, July, 1918.	Province.	Deaths.	Population, preliminary estimate, July, 1918.
North Brabant	1,699	719,799	Overyssel	1,622	433,114
Gelderland	1,830	726,741	Groningen	1,390	359,627
South Holland	3,562	1,645,920	Drenthe	1,394	205,083
North Holland	2,641	1,278,812	Limburg	1,118	438,198
Zealand	694	247,205			
Utrecht	664	330,088	Total	17,744	6,767,345
Friesland	1,100	384,760			

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RÉUNION ISLAND.

Influenza.

Epidemic influenza was reported present on the Island of Réunion, Indian Ocean, April 29, 1919.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended May 9, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Feb. 23–Mar. 8	55	30	
Calcutta	do		132	
Karachi	Mar. 16–22	1	1	
Indo-China:				
Province—				
Cochin-China—				
Saigon	Feb. 24–Mar. 9	122	73	
Java:				
Mid-Java				Jan. 24–Feb. 20, 1919: Cases, 1,183; deaths, 928.
Philippine Islands:				
Manila	Mar. 8–14	1		
Provinces				Mar. 8–14, 1919: Cases, 34; deaths, 26.
Batangas	Mar. 8–14	15	10	
Bohol	do	2	2	
Iloilo	do	5	2	
Laguna	do	7	9	
Pangasinan	do	5	3	
Manila	Mar. 15–21	4		
Provinces				Mar. 15–21, 1919: Cases, 37; deaths, 32.
Batangas	Mar. 15–21	11	10	
Iloilo	do	6	4	
Laguna	do	9	10	
Misamis	do	7	4	
Occidental Negros	do	1	1	
Pampanga	do	1		
Pangasinan	do	2	3	

PLAGUE.

Ceylon:				
Colombo	Mar. 2–15	11	7	
Egypt				Jan. 1–Mar. 27, 1919: Cases, 108; deaths, 82.
Cities—				
Alexandria	Mar. 23	1	1	European.
Suez	Mar. 22–26	14	9	
Provinces—				
Assiout	Mar. 23	3	3	
Girgeh	Mar. 22	3	3	
India				Feb. 23–Mar. 1, 1919: Cases, 4,555; deaths, 3,770.
Bombay	Feb. 23–Mar. 8	16	15	
Calcutta	do		27	
Karachi	Mar. 16–22	13	11	
Indo-China:				
Province—				
Cochin-China—				
Saigon	Feb. 24–Mar. 9	6	5	
Java:				
Mid-Java	Jan. 30–Feb. 11	110	110	
Mesopotamia:				
Bagdad	Feb. 22–28	6	4	
Siam:				
Bangkok	Feb. 16–22	6	6	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended May 9, 1919—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Sao Paulo	Mar. 3-9		1	
Canada:				
Nova Scotia—				
Halifax	Apr. 12-19	15		
Sydney	Mar. 30-Apr. 5	1		
Prince Edward Island—				
Charlotte Town	Apr. 9-16	1		
Ceylon:				
Colombo	Mar. 9-15	1		
China:				
Changsha	Mar. 16-22	3		
Chungking	Mar. 2-27			Present.
Nanking	Mar. 16-27			Do.
Colombia:				
Barranquilla	Apr. 6-12		1	
Egypt:				
Alexandria	Mar. 19-25	2	2	
France:				
Paris	Mar. 16-27	5	2	
India:				
Bombay	Feb. 23-Mar. 8	94	42	
Calcutta	do		62	
Karachi	Mar. 9-22	27	20	
Indo-China:				
Province—				
Cochin-China—				
Saigon	Feb. 24-Mar. 9	23	2	City and vicinity.
Italy:				
Palermo	Mar. 19 Apr. 1	28	1	Of which, from Mar. 26 to Apr. 1, 27 cases.
Turin	Jan. 27-Mar. 2	8	2	
Japan:				
Kobe	Mar. 23-Apr. 5	97	32	
Nagoya	Mar. 2-15	2		
Java:				
Mid-Java	Jan. 21-30	1		
West Java				Feb. 21-27, 1919: Cases, 4; deaths, 2.
Batavia	Feb. 21-27	7	2	
Mesopotamia:				
Bagdad	Jan. 11-Feb. 2	5		
Newfoundland:				
St. Johns	Apr. 12-18	4		Outports, 12 cases.
Portugal:				
Oporto	Mar. 9-22	43	22	

TYPHUS FEVER.

China:				
Antung	Mar. 24-30	1		
Egypt:				
Alexandria	Mar. 19-25	76	23	
France:				
Marseille	Mar. 1-31		31	Apr. 26, present in two civil and two military prisons.
Mesopotamia:				
Bagdad	Jan. 25-31	1		
Mexico:				
Aguascalientes	Apr. 6-13		2	
Mexico City	Mar. 16-29	85		
Netherlands:				
Rotterdam	Mar. 2-15	89	16	
Portugal:				
Oporto	Mar. 9-22	316	12	
Russia:				
Archangel	Feb. 15-Mar. 1	162	33	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 2, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17-30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13-19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18-Dec. 28	1,351	1,031	
Do	Dec. 29-Feb. 22	9,626	8,473	
Calcutta	Sept. 20-Dec. 21		241	Report for Nov. 23, 1918, missing.
Do	Dec. 29-Feb. 22		737	
Karachi	Jan. 26-Feb. 8	2	2	
Madras	Oct. 5-Dec. 28	264	164	Oct. 27-Nov. 2, 1918: Cases, 9; deaths, 4.
Do	Jan. 5 Mar. 8	426	296	
Rangoon	Oct. 5-Dec. 21	35	33	
Do	Dec. 29-Feb. 22	15	11	
Indo-China				July 1-Oct. 31, 1918: Cases, 733; deaths, 472.
Anam	July 1-Aug. 31	37	30	
Cambodia	July 1-Oct. 31	324	171	
Cochin-China	do	436	337	
Saigon	Oct. 7-Dec. 22	75	45	
Do	Dec. 3-Feb. 23	206	122	
Kwang-Chow-Wan	July 1-31	50	34	
Tonkin	July 1-Oct. 31	6		
Java:				
East Java				Oct. 7-Dec. 31, 1918: Cases, 351; deaths, 323. Jan. 1-28, 1919: Cases, 291; deaths, 176.
Surabaya district	Oct. 7-Dec. 31	655	423	
Do	Jan. 1-28	133	84	
Mid-Java				Sept. 25-Dec. 18, 1919: Cases, 3,282; deaths, 2,014.
Samarang	Sept. 26-Oct. 16	120	111	
West Java				Oct. 3-Dec. 11, 1918: Cases, 412; deaths, 238. Dec. 27, 1918-Jan. 23, 1919: Cases, 10; deaths, 3.
Batavia	Oct. 3-Dec. 11	291	148	
Do	Dec. 27-Jan. 23	8	2	
Cheribon	Jan. 3-9	1		
Mesopotamia:				
Bagdad	Oct. 11-18	8		
Philippine Islands:				
Manila	Sept. 22-Dec. 28	209	135	
Do	Dec. 29-Feb. 8	19	9	
Provinces				Nov. 2-Dec 28, 1918: Cases, 1,986; deaths, 1,515. Dec. 29, 1918-Mar. 7, 1919: Cases, 1,149; deaths, 803.
Albay	Dec. 15-21	1	1	
Ambos Camarines	Feb. 15-21	10	2	
Bataan	Nov. 17-Dec. 28	38	32	
Batangas	Nov. 2-Dec. 28	258	230	
Do	Dec. 29-Mar. 7	37	24	
Bohol	Nov. 2-Dec. 28	29	24	
Do	Dec. 29-Mar. 7	69	49	
Bulacan	Oct. 12-Dec. 28	51	8	
Do	Dec. 29-Feb. 21	42	26	
Capiz	Dec. 22-28	7	5	
Do	Jan. 5-25	28	14	
Cavite	Oct. 27-Dec. 21	207	115	
Do	Dec. 29-Jan. 25	17	16	
Cebu	Nov. 10-Dec. 21	50	27	
Do	Jan. 12-18	13	12	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 15	56	38	
Iloilo	Oct. 27-Dec. 21	112	78	
Do	Jan. 5-Mar. 7	170	109	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Mar. 7	118	78	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 21-30	7	14	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-Mar. 7	177	81	
Nueva Ecija	Jan. 12-25	9	6	
Occidental Negros	Feb. 2-28	7	4	
Oriental Negros	Nov. 2-Dec. 7	32	18	
Do	Jan. 5-Feb. 8	35	22	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Mar. 7	32	23	
Pangasinan	Nov. 2-Dec. 28	930	652	
Do	Dec. 29-Mar. 7	157	121	

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				deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 279.
Ukrania—				
Ekaterinaslav	Sept. 1–20	7	6	
Odessa	do	25		Sept. 1–20, 1918: 11 cases on s. s. Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27–Nov. 2	1	1	
Do	Feb. 9–Mar. 1	1	2	
China:				
Amoy	Nov. 24–Dec. 8			Present.
Chungking	Dec. 1–7			Do.
Hing-Ning district	Mar. 15			Do.
Hongkong	Oct. 1–Dec. 28	4	4	
Do	Jan. 1–31	5	4	
Ecuador:				
Duran	Feb. 16–Mar. 15	2	1	
Guayaquil	July 1–Dec. 31	20	7	
Do	Jan. 1–Mar. 15	50	14	
Taura	Dec. 16–31	1	1	
Egypt				Jan. 1–Nov. 21, 1918: Cases, 357; deaths, 153. Jan. 1–Mar. 20, 1919: Cases, 87; deaths, 66.
Provinces—				
Assiout	Feb. 24–Mar. 15	8	5	1 septicemic.
Girgeh	Feb. 22–24	4	2	2 pneumonic.
Minieh	Feb. 21–27	2	2	1 pneumonic.
Suez	Jan. 31–Mar. 16	18	9	
India				Sept. 23–Dec. 28, 1918: Cases, 24,279; deaths, 18,369. Dec. 29, 1918–Feb. 22, 1919: Cases, 20,951; deaths, 15,631.
Bombay	Aug. 18–Dec. 28	41	29	
Do	Jan. 12–Feb. 8	6	6	
Calcutta	Dec. 22–28		1	
Do	Jan. 12–Feb. 22		16	
Karachi	Oct. 19–Dec. 28	17	17	
Do	Dec. 29–Jan. 25	5	5	
Do	Feb. 16–Mar. 8	1	1	
Madras	Dec. 8–28	26	17	
Do	Dec. 29–Mar. 8	131	61	
Madras Presidency	Oct. 13–Dec. 28	1,152	774	Oct. 27–Nov. 2, 1918: Cases, 142; deaths, 38.
Do	Dec. 29–Mar. 8	2,562	1,726	
Rangoon	Oct. 5–Dec. 21	84	81	
Do	Dec. 29–Feb. 22	107	100	
Indo-China				July 1–Oct. 31, 1918: Cases, 161; deaths, 145.
Anam	July 1–Oct. 31	42	36	
Cambodia	do	72	72	
Cochin-China	do	65	35	
Saigon	Oct. 7–Nov. 24	5	1	
Do	Jan. 13–Feb. 23	4	3	
Kwang-Chow-Wan	July 1–31	1	1	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 2, 1919—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Java:				
East Java				Oct. 7-Nov. 18, 1918: Cases, 103; deaths, 109. Jan. 1-14, 1919: Cases, 69; deaths, 69.
Surabaya (district)	Oct. 7-Dec. 31	92	92	
Do	Jan. 1-14	34	34	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 14; deaths, 14.
Samarang	Sept. 25-Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16-29	5	2	
Siam:				
Bangkok	Sept. 21-28	4	3	
Do	Oct. 5-12	2	2	
Do	Jan. 19-25	1		
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.

SMALLPOX.

Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
Brazil:				
Rio de Janeiro	Dec. 1-28	46	19	Oct. 6-12, 1918: Cases, 15; deaths, 10.
Do	Dec. 30-Jan. 25	25	11	
British East Africa:				
Mombasa	Sept. 1-Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-18	2		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 22	6		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 10			Do.
Digby	....do			Do.
Halifax	Dec. 7-28	10		
Do	Jan. 5-Mar. 15	161		
Do	Mar. 20-29	20		
Middleton	Dec. 29-Jan. 4			Do.
Sydney	Jan. 5-Mar. 8	4		
Do	Mar. 23-29	7		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-Apr. 12	13		
Toronto	Feb. 2-15	2		
Do	Mar. 16-22	1		
Prince Edward Island—				
Charlotte Town	Feb. 27-Mar. 5	1		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-Mar. 8	30		
Paspebiac	....do	8		
Quebec	Dec. 15-21	1		
Do	Dec. 29-Mar. 15	14		
Ceylon:				
Colombo	Jan. 12-Feb. 22	2		
China:				
Amoy	Oct. 13-Dec. 28			Do.
Do	Jan. 5-Mar. 10			Do.
Antung	Feb. 10-16	1		
Do	Feb. 24-Mar. 2	1		
Canton	Nov. 17-23			Do.
Do	Feb. 9-15			Do.
Chungking	Nov. 10-Dec. 28			Do.
Do	Jan. 5-Mar. 1			Do.
Foochow	Nov. 24-Dec. 28			Do.
Do	Dec. 29-Feb. 8			Do.
Honkong	Dec. 15-21	1	1	
Do	Feb. 2-8	1		
Do	Feb. 16-22	4		

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Friedland	do	1		
Königsberg	do	8		In persons evacuated from the Ukraine.
Schkeuditz	do	1		
Tilsit	do	1		
Torgau	do	1		
Great Britain:				
Liverpool	Jan. 26–Mar. 15	7		Of these, 2 from vessels.
London	Mar. 9–15	5	1	
Greece:				
Saloniki	Feb. 2–15		3	
India:				
Bombay	Aug. 18–Dec. 28	35	8	
Do	Dec. 29–Feb. 22	175	62	
Calcutta	Sept. 29–Dec. 28		17	Report for week ended Nov. 23, 1918, missing.
Do	Dec. 29–Feb. 22		98	
Karachi	Sept. 29–Dec. 28	13	4	
Do	Dec. 29–Mar. 8	80	21	
Madras	Oct. 5–Dec. 28	62	40	
Do	Dec. 29–Mar. 8	148	70	
Rangoon	Oct. 20–Dec. 21	32	6	
Do	Dec. 29–Feb. 22	386	135	
Indo-China:				
Anam	July 1–Oct. 31	146	67	
Cambodia	Aug. 1–Oct. 31	165	74	July 1–Oct. 31, 1918: Cases, 620; deaths, 254.
Cochin-China	July 1–Oct. 31	400	112	
Saigon	Oct. 7–Dec. 22	20	5	
Do	Dec. 30–Feb. 2	8	3	
Do	Feb. 17–23	28	6	
Tonkin	July 1–Oct. 31	20	1	
Italy:				
Genoa	Jan. 9–Mar. 15	4	2	
Messina	Mar. 2–16	3		Cases reported in several localities in Province.
Palermo	Jan. 31–Feb. 20	2		
Japan:				
Kobe	Oct. 26–Dec. 28	186	46	
Do	Dec. 29–Mar. 22	499	165	
Taihoku	Jan. 15–Mar. 18	146	18	Island of Formosa.
Yokohama	Jan. 20–26	1		
Java:				
East Java				Oct. 7–Dec. 31, 1918: Cases, 22; deaths, 1. Jan. 1–21, 1919: Cases, 3; deaths, 3.
Surabaya (district)	Oct. 7–Dec. 31	16		
Do	Jan. 1–7	1		
Do	Jan. 15–21	2	2	
Mid-Java				Sept. 25–Dec. 18, 1918: Cases, 172; deaths, 3.
West Java				Oct. 2–Dec. 11, 1918: Cases, 809; deaths, 263. Dec. 27, 1918–Jan 23, 1919: Cases, 158; deaths, 41.
Batavia	Oct. 2–Dec. 11	185	151	
Do	Dec. 27–Jan. 23	34	23	
Lithuania				Sept. 1–Oct. 16, 1918: Cases, 44.
Manchuria:				
Dairen	Jan. 15–21	1		
Do	Feb. 22–Mar. 7	2	2	
Mesopotamia:				
Bagdad	Oct. 11–Dec. 27	308	97	
Do	Dec. 28–Jan. 10	3		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 2, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico:				
Ciudad Juarez	Nov. 24-30	1		
Do	Mar. 29-Apr. 5	1		
Mexico City	Sept. 22-Dec. 28	23		
Do	Dec. 29-Mar. 22	12		
Vera Cruz	Feb. 10-Apr. 12	2	1	
Newfoundland:				
St. Johns	Dec. 6-20	4		
Do	Dec. 28-Mar. 14	21		
Do	Mar. 22-Apr. 11	8		
Outports—				
Avondale	do	4		
Blaine Harbor	Dec. 14-20	2		
Bay of Islands	Jan. 11-17	6		
Do	Feb. 15-21	10		
Bay Roberts	Dec. 21-27	1		
Bonavista	Jan. 26-31	1		
Brigus Junction	Mar. 1-28	3		
Bryants Cove	Dec. 7-13	3		
Burin	do	4		
Coleys Point	Dec. 14-20	1		
Curling	Jan. 26-31	3		
Frenchmans Cove	Feb. 1-7	1		
Humbermouth	Mar. 15-21			Present.
Kings Cove	Jan. 18-Mar. 14	2		
Little Paradise	Feb. 9-14	1		
McIvers	Feb. 1-7	15		
Merasheen	do			Present.
Mercers Cove	Feb. 9-14	1		
Middle Arm	Feb. 1-7	40		Bay of Islands.
Mortons Harbor	Mar. 8-14	1		
Musgrave Harbor	Dec. 7-13	4		
Do	Jan. 11-17	6		Feb. 7, 1919: Present.
Paradise	Dec. 7-13	60		Placentia Bay.
Petitforte	Feb. 15-21	1		
Saddle Hill	do	1		Harbor Grace.
Springdale	Feb. 15-Mar. 7	7		
St. Georges	Feb. 1-Mar. 28	32		Other outports Mar. 29-Apr. 11, 1919: 14 cases.
St. Jacques	Jan. 18-24	2		
Panama				Aug. 1-31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1-25, 1919: Cases, 28.
Colon	Dec. 15-21	1		
Do	Dec. 29-Feb. 9	8		
Philippine Islands:				
Manila	Nov. 2-16	5	3	
Do	Dec. 29-Mar. 22	34	17	Varioloid, 13.
Portugal:				
Lisbon	Nov. 16-Dec. 28	843		
Portuguese East Africa:				
Lourenco Marques				July 1-Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1-3	4		
Do	Jan. 17-23		1	
Do	Feb. 1-Mar. 15	16	1	
Spain:				
Barcelona	Jan. 9-Feb. 11		5	
Do	Feb. 19-Mar. 11	2		
Bilbao	Jan. 1-Feb. 20	6		
Cadiz	Oct. 1-Dec. 31	18		
Do	Jan. 1-31		17	
Madrid	Sept. 1-Oct. 31	153		
Do	Jan. 1-Feb. 28		74	
Seville	Nov. 1-Dec. 31		8	
Do	Jan. 1-31		3	
Valencia	Nov. 10-Dec. 21	40	9	
Do	Dec. 29-Jan. 25	93	10	
Do	Feb. 16-Mar. 8	160	17	
Straits Settlements:				
Penang	Oct. 6-12	1		
Singapore	Feb. 2-22	3		
Sweden:				
Stockholm	Feb. 2-8		1	
Union of South Africa:				
Cape Town	Aug. 1-30	1		
Do	Dec. 21-Jan. 31	1		
Johannesburg	Aug. 1-Oct. 31	12		Nov. 1-30, 1918: Cases, 4.

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Alexandria	Oct. 11–Dec. 31	180	[illegible]	
Do	Jan. 1–Mar. 11	249	69	Confined to one quarter of city and mostly to natives.
Germany				Oct. 20–Nov. 7, 1918: Cases, 12; deaths, 1.
Breslau	Sept. 29–Oct. 19	12	8	
Gumbinnen district	Oct. 20–Nov. 7	1		
Dresden	do	1		
Griefswald	do	1		
Godullahutte	do	1		
Koenigsberg	Sept. 29–Oct. 19	3	1	
Koenigshutte	Oct. 20–Nov. 7	1	1	
Magdeburg	do	2		
Mostelten	Sept. 29–Oct. 19	7	2	District of Allenstein.
Oppeln district	Oct. 20–Nov. 7	5		
Great Britain:				
Cork	Feb. 2–22	4		
Glasgow	Dec. 22–28	5		
Do	Jan. 5–Feb. 8	9	1	
Do	Mar. 9–15	1		
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29–Dec. 21		34	
Do	Dec. 29–Feb. 15		78	
Italy:				
Bari	Feb. 3–9	19		In soldiers returning from Black Sea.
Naples	do	3		Do.
Taranto	do	2		
Japan:				
Nagasaki	Nov. 10–Dec. 29	13	4	
Do	Dec. 30–Mar. 16	30	4	
Java:				
East Java				Oct. 7–21, 1918: Cases, 5.
Surabaya	Oct. 7–21	4		
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 3.
West Java				Oct. 2–23: Cases, 31; deaths, 6.
Batavia	Oct. 2–23	15	4	
Lithuania				Sept. 1–Oct. 26, 1918: Cases, 539; deaths, 23.
Macedonia:				
Drama	Mar. 17			Present.
Epirus	Mar. 21			Do.
Kavala	Mar. 17	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5–Dec. 27	2		
Do	Dec. 28–Jan. 10	3		
Mexico:				
Aguascalientes	Feb. 2–23		3	
Do	Mar. 24–30		1	
Guadelajara	Nov. 1–Dec. 31	4	1	
Do	Jan. 1–Feb. 28	2	2	
Mexico City	Sept. 22–Dec. 28	434		
Do	Dec. 29–Mar. 22	256		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 2, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Netherlands:				
Amsterdam	Dec. 8-14	1		
Do	Jan. 12-18	4		
Delft	Feb. 26			Present.
Harlem	do			Do.
Leiden	do			Do.
Limburg	do	5	1	Mining district.
Rotterdam	Feb. 2-Mar. 22	404	71	Jan. 30-Feb. 27, 1919: Cases, 462; deaths, 46.
Schiedam	Feb. 26			Present.
Poland				Sept. 29-Oct. 26, 1918: Cases, 572; deaths, 50.
Lodz	Sept. 29-Oct. 26	55	8	
Warsaw	do	111	13	
Portugal:				
Braga	Mar. 24			
Oporto	Mar. 8-15	184		
Russia:				
Archangel	Jan. 15-Feb. 1	35	10	
Ukraine				Apr. 5, 1919: Reported to be spreading.
Serbia				Do.
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 30	43		
Do	Jan. 17-Mar. 15	143	15	
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Bahia	Jan. 12-18	2		
Pernambuco	Oct. 1-Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29-Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1-30	1		
Do	Mar. 1-15	1		
Catarama	Feb. 1-15	1		
Cholo	Jan. 1-15	1		
Daule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-Mar. 15	5	1	
Guayaquil	July 1-Dec. 31	326	177	
Do	Jan. 1-Mar. 15	123	67	
Hacienda Vainilla	Feb. 16-28	1		
Milagro	Nov. 1-15	1		
Do	Feb. 1-Mar. 15	2	1	
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-Feb. 28	2	2	
Payo (Hacienda)	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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PUBLIC HEALTH REPORTS

VOL. 34 MAY 16, 1919 NO. 20

NEWER METHODS OF CONTROLLING DIPHTHERIA.

The excellent results obtained by Park with routine Schick tests and the subsequent active immunization of susceptible individuals with toxin-antitoxin mixtures should lead to the wider use of these procedures for the administrative control of diphtheria. The attention of State and municipal health officers is therefore called to the article on page 1063 describing the outfits supplied by various manufacturers of biological products for making Schick tests and for actively immunizing with toxin-antitoxin mixtures. The widespread use of the procedures mentioned, especially where diphtheria is at all prevalent, would constitute a distinct advance in the present methods of controlling this disease.

WORK OF RED CROSS ORGANIZATIONS IN RELATION TO THE PREVENTIVE MEDICINE OF THE FUTURE.[1]

By Sir Arthur Newsholme, K. C. B.

It is difficult to give, as I am invited to do, in brief space and without the detailed reports of proceedings in which I took part, a clear conception of the conclusions reached at the extremely important International Conference of Red Cross Societies which was held in Cannes during April of this year.

I shall endeavor, however, to state the conception which gave rise to the conference and to give some of the conclusions reached by the experts in a number of departments of medicine on which are being based the initial steps for the organization of a new departure in Red Cross work.

It is unnecessary to remind actual Red Cross workers of the vast amount of beneficent work, rendered possible by the gifts of possibly half of the American population, which has been carried out by your agencies in the various belligerent countries. The record of saving of life, of alleviation of suffering, and, in other instances, of prevention of greater suffering is one calling for gratitude and congratulation. This work has been rendered possible by an unrivaled com-

[1] Address delivered at a meeting called by the American Red Cross, Washington, D. C., May 2, 1919.

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upon itself the burden of the emergency preventive measures as well as of measures of relief.

In so doing it has acted wisely. Preventive work is always more productive in results than relief work. It is also more economical. It is wiser as well as more humane to erect a parapet along the top of a dangerous cliff than to provide an ambulance at its base.

I do not, however, wish to give countenance to the notion that prevention and treatment of disease must be regarded in antithesis. The two are parts of a whole and not distinct and separate. This may be illustrated by two of the most serious diseases to which humanity is subject, tuberculosis and syphilis. Of these, tuberculosis is probably the chief producer of dependent widows and orphans, while syphilis, on the authority of Sir William Osler, must be regarded as third among the killing diseases. For the prevention of both of these diseases treatment forms an indispensable measure. Every arrangement conducing to the comfort or recovery of the tuberculosis patient diminishes the risk of massive infection in his family; and the prompt treatment of syphilis by arsenobenzol preparations is the most effective means for securing the patient's immediate disinfection as well as his progress toward cure.

And even when the elementary personal infection is absent, it can be argued with justice that the prompt and efficient medical treatment and nursing of the sick not only diminish the duration of individual disability, but prevent the impoverishment and enfeeblement of other members of the same family.

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But for an increasing proportion of the total sickness of humanity, total prevention is now possible, and I need scarcely cite the almost complete disappearance of typhus in western nations in peace time, the rapid decline of enteric fever, and the improvement in regard to a large number of other diseases. The number of preventable diseases is being steadily increased, as investigation progresses, and as our knowledge of the already ascertained laws of health increases and becomes disseminated among the general population.

It was, therefore, a happy inspiration of Mr. Davison, the president of the American Red Cross, which led to his calling together the international conference of Red Cross Societies at Cannes, with a view to considering means by which the world-wide activities of Red Cross workers might be utilized for the prevention of illness as well as for the treatment of sick and wounded mankind. It is a vision of the future, which, I think, will have a great influence on the welfare of mankind, if, as I am confident will be the case, the conception fires the souls of the multitude of Red Cross workers and contributors in every civilized country, and leads them to determine against demobilization of their forces and to continue their beneficent activities against the horrors of peace, which, in the aggregate, are even more serious to mankind than those of war.

The statement that the devastations produced by disease in times of peace are even greater than the loss of life from war, may be illustrated by the experience of England and Wales. In the four years, 1911–1914, immediately preceding the World War, 2,036,466 persons died in England and Wales, while, according to official figures, the total loss of men, during the four and one-fourth years of war, was 835,743, including 161,800 presumed dead. The war figures give the entire loss for the British Empire; but it can not be far from the truth to state that war on the gigantic scale of the war from which we have just emerged has killed in Great Britain about one-third as many as have died in the civilian population in a corresponding period. I do not lose sight of the fact that a large proportion of the civilian deaths occur in ripe old age, and that 28 per cent of the total civilian deaths occur among children under 5, while those destroyed by war are adults and the most virile of our race. But the greater part of the deaths in childhood, as well as in adult life, before old age is reached, are preventable; and in the future will be prevented, given adequate research, intelligent and unsparing application of knowledge already in our possession, and an avoidance of the public parsimony which in relation to public health constitutes the most serious form of extravagance. That is the ideal which Mr. Davison and his collaborators place before us; and it was to devise plans to this end and to enlist the continued cooperation of all Red Cross workers that the conference was called at Cannes.

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the public purse and the public weal.

There is, and I think always will be, ample scope for supplementation of official work by voluntary workers, for the experimentation in new and promising work which it is so difficult to initiate in official circles, and for the undertaking of necessary work by devoted volunteers when public opinion and officialdom refuse to undertake it.

This disposes of the argument that Red Cross activities in the prevention of disease merely prevent the development of official work. The true object of all voluntary workers is to stimulate official public-health work, and, when in any sphere the latter is fully developed, to welcome the disappearance or reduction of voluntary nonofficial work, or seek the new means of social help which are always waiting for devoted workers to initiate.

The conference agreed that the new work of the Red Cross would naturally divide itself into two parts, an international bureau and national organizations. The duties of these and their relation to each other will be more clearly seen in the light of experience. The international bureau in the scheme proposed for the consideration of the conference, and which received general approval, would act as a great center for collecting information on various public-health subjects, and for digesting it and, subsequently, for distributing it by means of special publications, or periodical journals, or on application from those requiring specialized information. It would also act as a means of educating the general public on urgent problems affecting its welfare; and it would be utilized as a center, organizing in less favored communities missions which would undertake local investigations and remedial work. These surveys and activities

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would be intended rather as demonstration centers than as permanent organizations, the intention being to withdraw them as soon as the necessary work could be carried on by local Red Cross or other organizations.

It was suggested that the central bureau should comprise a number of branches dealing with epidemic diseases, tuberculosis, venereal diseases, child welfare, nursing, and other subjects; collating and analyzing information and distributing it through the medium of the National Red Cross of each country.

Such a central bureau, it will, I think, be agreed, will be of the greatest value to all social and public-health workers, while not clashing with any existent agency.

The proposed organization of Red Cross agencies for preventive work has already received an imprimatur in the draft of the league of nations; and it would be appropriate that its headquarters should be near, if not side by side with, the future home of that league. If it receives the full development for which we hope, it will form, perhaps, a chief instrument in securing peace and continued happiness for mankind.

The relation of the central bureau to National Red Cross societies will be one of mutual cooperation. The central bureau will provide information and facilities for national work; the actual work will need to be carried out in each country nationally and in the main from funds supplied by that country.

It is not intended that the National Red Cross shall undertake, much less compete with, work already being carried out either by ocal authorities or by existing voluntary work. If, for instance, here is a society concerning itself with child welfare, or the prevenion of tuberculosis, or of venereal diseases, the National Red Cross vould naturally give such assistance as it could through its volunary workers in this special work, while leaving untouched existing rrangements. If no such societies existed the National Red Cross night advantageously assist in their formation, retiring as soon as he separate organization was working.

In countries in which official and existent voluntary agencies carcely exist, more active work of the Red Cross organization will e called for; in such countries assistance may be needed from the entral international bureau.

Evidently there are many points of central and national admintration requiring and now receiving fuller and more detailed inforation, and all that need now be said is that it appears to me certain iat international and national Red Cross organizations which will oncern themselves with the prevention of disease as well as with ie relief of suffering will be formed, and that they will have great fluence in hastening the reduction of human disease.

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The second week's deliberations of the conference at Cannes were filled with meetings of committees of experts and more formal sectional meetings, at which lines of policy on certain specific subjects were formulated for the later deliberations of Red Cross societies in Geneva.

It is unnecessary to summarize in detail the scientific recommendations reached in various subjects. It may suffice, as indicating the wide scope of the field of work about to be surveyed, that among the more urgent problems of preventive medicine, priority was given to advocacy of combined efforts for the prevention of the major ills of mankind, of the provision of laboratory assistance in the diagnosis of disease, and of securing more accurate vital statistics and improvements in public-health legislation.

In child-welfare work, the importance of health visiting, of child-welfare centers, of an improved midwifery service, and of continuous observation of children under school age as well as of scholars was emphasized.

In regard to tuberculosis, stress was laid on the essential points that measure against this disease. The scope of this work must embrace the whole of the sick lifetime of the patient, and must include, when necessary, measures for obviating the results arising from the fact that the partially recovered patient commonly is unable to earn an economic wage.

In the prevention of venereal diseases a similarly wide outlook was advocated, including the necessary social and moral as well as medical measures against their spread.

In the preceding brief statement I have endeavored to indicate the main outlines of the proposals considered by the Cannes conference. My statements are merely those of a participant in the conference; and it is evident that outside of the momentous decision to endeavor to retain the forces of Red Cross organizations and to secure their assistance in the great impending struggle against disease no final decisions have been made. The growth of the central and of each of the national organizations in the desired direction must necessarily occupy time, though I believe development will be rapid once the great ideal is visualized clearly by Red Cross workers in each country.

I have referred in an earlier part of these remarks to the imperfections of governments, central and local, in the control of disease. These imperfections indicate one of the most promising fields in which voluntary agencies like the Red Cross can assist toward greater efficiency. Both local and central authorities are elected by the people themselves and the laws and regulations for the promotion of the public health—and what is even more important, the enforcement of existing regulations—depend for their efficiency

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on public opinion which we can all assist in forming. The natural tendency on the part of the social enthusiast who has been disappointed in his efforts at reform is either to retire from the fight or to organize a voluntary organization having the same end in view. This last may sometimes be the best line to pursue, though in that case endeavor should be made to secure friendly relationship with, if not also the active cooperation of, the local authority. But often the most hopeful plan is to fight the local elections and to secure the election on local governing bodies of men and women who will give those bodies no peace until the necessary reforms are secured.

If we are to be helpful we must be kindly and charitable in our criticism of local authorities. Nothing has made it so difficult to secure good men and women to undertake the burden of local government as the undiscriminating and uncharitable criticism aimed at those engaged in it. Criticism of members of our central and local governing bodies is not seldom deserved; but critics are too often those who will give no assistance in the work which, with insufficient knowledge, they vilify. When we hear of scandal in administration, let us have a sense of proportion, remembering grosser corruption, evidenced for instance in Pepy's Diary, and especially remembering that the best way to remove corruption is by taking a part ourselves in the work of central or local government, or by steadily upholding those who are doing so with integrity.

The onlooker, whether it be on voluntary or on official work for the commercial good, has his duty to perform as well as the worker. It is his duty to make himself acquainted with local conditions and with local administrations, even though he takes no part in it. A chief need at the present time is an interested study by every adult of all the phases of local administration in each district; and in my view, Red Cross organizations will be rendering inestimable service to the community if they succeed in educating the public conscience to this effect. Increased local patriotism is urgently needed if the prospective fight against disease by the Red Cross societies is to succeed, and if the further triumphs of preventive medicine within our reach are to be secured. To this end enthusiasm will need to be infused into public health administration as well as into the work of voluntary agencies; and it is only by developing all the possbilities of our governing bodies as well as of voluntary societies and by securing the closest cooperation between the two that the new ideal of the Red Cross organization can be realized.

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concerted action on the part of all the citizens of the United States to help eradicate the conditions existing was made convincingly apparent.

The Public Health Service immediately offered its cooperation to the various State boards of health in a campaign to control these diseases, suggesting the establishment in each State of a bureau of venereal diseases to have general supervision over all phases of this important work. The plan was to have an officer of the Public Health Service stationed in each of the various States for the purpose of cooperating with the State boards of health in establishing a fourfold work as follows:

1. Securing the reporting of venereal infections in accordance with State laws or State boards of health regulations.

2. Carrying on repressive measures, including the isolation and treatment in detention hospitals of infected persons who are unable or unwilling to take the necessary measures to prevent themselves from becoming a menace to others.

3. Establishment of free clinics for the treatment of venereal diseases, and extending the facilities for early diagnosis and treatment by providing proper laboratories to make exact diagnosis and examination to determine when patients might be released as noninfectious.

4. To carry on a general educational campaign to inform the public as well as infected individuals regarding the nature of these diseases and the manner in which they are spread.

Read at the meeting of the Alabama Medical Association at Mobile, Ala., Apr. 15, 1913.

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On July 1, 1918, the President issued an Executive order placing all public health activities conducted by Federal agencies under the supervision of the Public Health Service. On July 9, Congress passed an act entitled "An Act Making appropriations for the support of the Army for the fiscal year ending June thirtieth, nineteen hundred and nineteen," under chapter 15 of which act, known as the Chamberlain-Kahn bill, there was created an Interdepartmental Social Hygiene Board and a Division of Venereal Diseases in the United States Public Health Service.

The Interdepartmental Social Hygiene Board is the agency charged with the disbursement of appropriations carried in this act of Congress, with the exception of $200,000 appropriated for the establishment and maintenance of the Division of Venereal Diseases in the Public Health Service.

In compliance with the President's order and the provisions of the above-mentioned act, the United States Public Health Service, through its Division of Venereal Diseases, is engaged in an active and thorough campaign against venereal diseases in civil communities throughout the United States, working through State boards of health and utilizing medical, educational, and law-enforcement measures.

Section 6 of the act provides for the allotment to State boards of health of $1,000,000 each year for two fiscal years, beginning with the fiscal year commencing July 1, 1918, for venereal disease control. This appropriation was divided pro rata among the States and the District of Columbia, and allotments were made to the States during the fiscal year beginning July 1, 1919, that agreed to comply with certain regulations promulgated by the Secretary of the Treasury. These regulations in brief are as follows:

1. The various States, in order to receive the sum to which they are entitled, must have a law or State board of health regulation requiring the reporting of all venereal diseases.

2. An officer of the Public Health Service shall be assigned to each State receiving an allotment for the general purpose of cooperating with the State health officer in supervising the venereal disease control work in the State.

3. Local or legislative funds that may be available shall be used by State or city health authorities having jurisdiction for extension of the work, and such funds must not be conserved through the expenditure of the funds that are allotted by Congress through the United States Public Health Service.

4. In extension of the educational measures the State's health authorities and its bureau of venereal diseases shall exert their efforts and influence for the organization of a State venereal disease committee for furthering the comprehensive plan for nation-wide venereal disease control.

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the law, are:

1. To study and investigate the cause, treatment, and method of prevention of venereal diseases.

2. To cooperate with State boards of health in carrying on measures to prevent the spread of venereal infections.

3. To promulgate and enforce interstate quarantine regulations governing the travel of venereally infected persons.

The Division of Venereal Diseases in the Bureau of the Public Health Service is adapting its activities during the present year very largely to the work of cooperation with State boards of health in instituting venereal disease control measures. At the venereal disease clinics maintained by the service in extra-cantonment zones, some opportunity is given to study and investigate the cause, treatment, and method of spread of venereal diseases, and in accordance with the third designated duty, regulations for interstate travel of venereally infected persons were promulgated by the Secretary of the Treasury on November 19, 1918. These regulations are known as Amendment No. 7 to Interstate Quarantine Regulations. The following is a brief summary of the regulations governing the travel of venereally infected persons:

Under section 1 of this amendment any person infected with syphilis, gonorrhea, or chancroid, who wishes to engage in interstate travel, must first obtain a permit in writing from the local health officer under whose jurisdiction he resides. This permit shall state that, in the opinion of the health officer, such travel is not dangerous to the public health. Section 2 requires that any person infected

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with syphilis, gonorrhea, or chancroid, desiring to change his residence from one State to another, must first obtain his release, in writing, from the local health officer, and he shall inform the local health officer as to the place where he intends to reside. He shall agree in writing to report in person to the proper health officer having jurisdiction over the community to which he intends to move. In this manner, proper supervision to prevent the spread of venereal infections from one State to another will be made possible.

In the work of cooperating with the State boards of health the standardization of educational methods has received much attention, and educational measures have been developed through the preparation of literature, lectures, moving-picture films, lantern slides, exhibit cards, and placards advertising clinics.

The division is cooperating with the State boards of health and other State officials, as well as with unofficial organizations of allied purpose and good standing. It also works in close cooperation with the Surgeons General of the Army and Navy, with the Commissions on Training Camp Activities of the War and Navy Departments, and with the American Red Cross. In each State which accepts the cooperation of this division (44 States have already accepted their allotment), a commissioned officer of the Public Health Service is assigned for venereal disease control work for the State board of health; or a physician, selected by the State health authorities and approved and recommended for appointment by the Surgeon General of the United States Public Health Service, is appointed an acting assistant surgeon in the Public Health Service, and assigned for the general purpose of cooperating with the State health officer and supervising the work of venereal disease control in that State. He thus becomes the joint appointee and representative of both the State board of health and the Public Health Service; he shall report to both and shall carry out the wishes and policies of both. If any conflict become apparent, he shall report the same to both offices for adjustment. This officer is designated as the service representative of the State bureau of venereal diseases.

The following is a general outline of the policy of the State bureaus of venereal diseases, agreed upon by the Public Health Service and the various State boards of health:

It is the aim and purpose of the State bureau to reduce the prevalence of the venereal diseases as much and as rapidly as possible by the detection and treatment of all carriers not otherwise under treatment and by preventing the exposure of other persons to these infectious cases. There must therefore be a thorough campaign for prompt medical treatment, combined with the application of all measures that experience has shown to be helpful, such as education, law enforcement, and follow-up work. The moral problems which are involved are recognized as being very important, and all organiza-

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d leading citizens of a town to secure the funds necessary to organ-
e a clinic and begin work.

Venereal clinics will be organized under the direct supervision of
e State venereal disease control officer, who will forward to the
ıblic Health Service all data relative to the establishment and
eration of the clinics thus organized. These clinics should have
very close relation to the county health officer and the local medical
ofession, and to the community in general. The standards for
nereal disease clinics are to be determined jointly by the State
alth officer and the State venereal disease control officer repre-
nting the Public Health Service. Instructions in regard to the
eration of the approved venereal disease clinic have been furnished
all physicians in direct charge of a clinic being operated cooper-
ively by the Public Health Service and the various State boards
health. It is not believed necessary to explain in detail the
ethods outlined for the proper management of a venereal disease
nic. However, the work carried on includes treatment, educa-
onal measures, and social service follow-up work. At the time of
e patient's first visit, he is given a circular of information regarding
e serious nature of the venereal diseases and intended to impress
e patient with the necessity of exercising the proper care to pre-
nt the infection from being passed on to others.

In order to stress one of the most important phases of the venereal
sease control work, particular attention is invited to the necessity
r the prompt reporting of cases of venereal diseases by physicians
the State Board of Health. As physicians are required to report
her communicable diseases, such as smallpox, typhoid, and scarlet
ver, so can and should they report gonorrhea, syphilis, and chancroid.
attacking venereal diseases as a public health problem, the work
designed to be carried on as near as possible as it would be for any
her communicable disease. It is known to the medical pro-

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fession that these diseases are spread by certain causative organisms passing from an infected individual to a well person. When the cause of the disease is known and its method of spread can be recognized, the precautions to be taken to prevent spread may be developed.

One reason that venereal diseases have not in the past received the attention from health officers which their seriousness warrants, is that many complicated factors enter into the conditions favoring the spread of these infections. In the case of smallpox or malarial fever, there is no shame or moral stigma attached to the acquirement of the disease. But in the case of syphilis and gonorrhea, which spread very largely through illegitimate practices, there is usually a certain amount of moral stigma attached to their acquirement. However, if the health officers will not let the question be complicated by social, moral, and economic considerations, except as they have a direct bearing upon the subject, the actual control of those already infected can be successfully carried out.

In conclusion, it is desired to make mention of the splendid cooperation from various organizations which has been received by the Public Health Service in its program for the control of venereal diseases. When the work was first organized, an association of retail druggists representing about 8,000 of the 47,000 retail druggists of the United States offered its cooperation in this important work. A card was prepared, approved by the druggists' organization, and mailed out to druggists all over the United States, by the Public Health Service. This card was in the nature of an appeal to the druggists to support the venereal disease control work being carried on, by pledging themselves to discontinue the sale of venereal disease nostrums and also to refuse to prescribe remedies for the self-treatment of venereal diseases. The response to this appeal was most gratifying. The druggists not only agreed to cooperate in the manner indicated above, but also agreed to hand to each customer applying for a remedy ordinarily used for the self-treatment of venereal diseases, a circular advising the sufferer to seek competent professional service, either at the hands of a practicing physician or at one of the numerous venereal disease clinics established for the treatment of these cases. This action on the part of the druggists has resulted in increasing the number of persons applying to physicians for treatment of venereal diseases, and as some physicians do not care to treat venereal diseases, a circular letter has been issued by the Public Health Service to all of the physicians in the United States, asking that they carry out certain measures to assist in bringing venereally infected persons under proper treatment.

The physicians were also asked to cooperate with the State board of health authorities in promptly reporting their cases of venereal diseases as provided by law. The response on the part of the medical

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not yet ready to support such a campaign as is now being carried on. Quite to the contrary, it has everywhere been found that the people are intensely interested in this problem; that they are astounded at the facts shown by the draft as to the prevalence of venereal diseases in the civilian population; and that they are now determined that the venereal diseases shall be checked and their great prevalence reduced as far as possible. The support of the people in this work is absolutely assured.

THE SALIVA IN PELLAGRA.

Attention is invited to the technical paper printed on page 1068 embodying the results of laboratory investigations carried on by the Public Health Service at its pellagra hospital in Spartanburg, S. C. This paper gives some interesting data on the character of the saliva in patients suffering from pellagra.

It is well known that in pellagra the condition of the mouth, and especially of the tongue, is of considerable significance in establishing a correct diagnosis. In true pellagra the tongue is vividly red and more or less swollen. The literature also speaks of salivation as a symptom of pellagra.

The very careful quantitative studies made in these investigations showed that, though there were cases of increased salivary flow, the salivation spoken of by the patients was often apparent rather than real and was seemingly due to some inhibition of swallowing combined with a peculiar, ropy change in the saliva which made its presence in the mouth more obvious. A tendency toward a greater quantity of solids in the saliva of pellagra patients was also observed.

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The investigations indicate that the diastatic power of the saliva of pellagra patients is at least as great as that of normal people. In no case, whether the flow of saliva was scanty or very copious, was the diastatic power lacking.

While the amount of mucus precipitated from saliva by acetic acid was greater for the saliva of the pellagra patients than for the controls, the increase is apparently unrelated to the severity of the symptoms, either general or oral.

The study of the sulphocyanate content of the saliva disclosed that this is much less marked in the case of pellagra patients than it is in the saliva of normal people. Since it is generally admitted that the sulphocyanate arises from the metabolism of protein and the detoxicating action of the system, whereby poisonous cyanides are converted into the relatively innocuous sulphocyanate, the investigators believe that in the pellagra patients there is both a lessened protein intake and a detoxicating power feebler than normal.

The reaction of the saliva in pellagra is somewhat more alkaline than is that of normal saliva.

THE SCHICK TEST AND ACTIVE IMMUNIZATION AGAINST DIPHTHERIA.

One of the pioneers in the introduction of diphtheria antitoxin into this country, and in other measures for the administrative control of diphtheria, the New York City Health Department is taking steps to secure the adoption of two additional measures for the control of this disease, namely, the employment of the Schick test in order to discover susceptible individuals and the active immunization of such individuals by means of toxin-antitoxin mixtures.

In their WEEKLY BULLETIN of March 15, the New York authorities call attention to the fact that, although there has been a continuous reduction in the death rate from diphtheria, "the mortality from this disease is still much higher than it should be, when we consider the armamentarium at hand for preventive and curative work." In New York City, despite the excellent results of antitoxin treatment, diphtheria still causes over 1,000 deaths annually, approximately 20 per 100,000 population. Rates only a little less than this prevail in Rhode Island, Pennsylvania, Kentucky, North Carolina, Massachusetts, and Michigan.

As a result of extensive studies by means of the Schick test conducted under the direction of Dr. W. H. Park, mainly among the charges of various child-caring institutions, it has been found that

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susceptibility to diphtheria is present in about the following proportions:

Age:	Per cent susceptible.
Under 3 months	15
3 to 6 months	30
6 months to 1 year	60
1 to 2 years	70
2 to 3 years	60
3 to 5 years	40
5 to 10 years	30
10 to 20 years	20
Over 20 years	15

THE SCHICK REACTION.

"The Schick reaction is a convenient and reliable clinical test, by which the antitoxic immunity of an individual to diphtheria can be determined. A fresh solution of diphtheria toxin is prepared for this purpose of such strength that 0.1 cc. or 0.2 cc. represents 1 50 of the minimum lethal dose of toxin for a 250-gram guinea pig. This amount is injected with a good syringe, preferably a 1 cc. 'Record' and a fine steel or platinum-iridium needle, *intracutaneously* on the flexor surface of the forearm or arm. A good guide for the insertion of the needle into the proper layer of the skin is to be able to see the oval opening of the needle through the superficial layers of the epidermis. A properly made injection is recognized by a distinct wheal-like elevation, which shows the prominent openings of the hair follicles. The result of the test should be read at the end of 24, 48, 72, and 96 hours.

"The reaction that appears at the site of injection may be either positive, negative, pseudo, or combined positive and pseudo.

"The *positive* reaction represents the action of an irritant toxin upon tissue cells that are not protected by antitoxin. It indicates, therefore, an absence of immunity to diphtheria. A trace of redness appears slowly at the site of injection in from 12 to 24 hours, and usually a distinct reaction in the course of 24 to 48 hours. The reaction reaches its height on the third or fourth day, and gradually disappears, leaving a definitely circumscribed scaling area of brownish pigmentation, which persists for 3 to 6 weeks. At its height the positive reaction consists of a circumscribed area of redness and slight infiltration, which measures from 1 to 2 cm. in diameter. The degree of redness and infiltration varies to a great extent with the relative susceptibility of the individual. The positive reaction is seen in about 7 to 10 per cent of the new-born, 30 per cent during the first year of life, 35 decreasing to 15 per cent between 2 and 14 years, and 10 per cent of adults.

"In the *negative* reaction the skin at the site of injection remains normal. The negative reaction definitively indicates an immunity to

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diphtheria if the test-toxin is of full strength, has been freshly diluted, and the injection has been made into the proper layer of the skin. A negative reaction obtained in a child that has reached the age of 3 years indicates that it has an immunity which is probably permanent. Of 1,000 carefully observed individuals, not one developed clinical diphtheria, even though they were exposed to the disease, and some were carriers of virulent diphtheria bacilli.

"The *pseudo-reaction* represents a local anaphylactic response of the tissue cells to the protein substance of the autolyzed diphtheria bacilli, which is present in the toxic broth used for the test. Like other anaphylactic skin phenomena, the reaction is of an urticarial nature, appears early within 6 to 18 hours, reaches its height in 36 to 48 hours, and disappears on the third or fourth day, leaving a poorly defined small area of brownish pigmentation and generally no scaling. At its height the pseudo-reaction shows varying degrees of infiltration, and appears as a small central area of dusky redness with a second areola, which gradually shades off into the surrounding skin. The reaction may also have a rather uniform red appearance, and be two or three times the size of true reaction. A control test, made by injecting toxin heated to 75° C. for 5 minutes, gives a similar reaction which passes through the same clinical course. Individuals who give a pseudo-reaction only, have antitoxin and are immune to diphtheria. The false reaction is seen in relatively few of the older children, but in a much larger number of adults, in whom it is of importance to recognize and control it both by the injection of heated toxin and by observing the clinical course of the reaction.

"The *combined* reaction represents the positive and the pseudo-reaction in the same individual. The central area of redness is larger and better defined, the amount of infiltration is also more marked. The reaction is recognized by noting the evidence of a true reaction, a definitive area of scaling brownish pigmentation, after the pseudo-element has disappeared in the test. In addition, a similar though weaker reaction is obtained in a control test made with heated toxin. The control represents only the pseudo-reaction. The combined reaction indicates an absence of immunity to diphtheria.

"The Schick test is of practical value in determining the immunity to diphtheria of the public in general, but especially of the child population in schools, hospitals, institutions, and in homes during an outbreak of diphtheria. It will save a considerable amount of antitoxin and avoid unnecessary sensitization of more than 65 per cent of the exposed individuals. The test is also of distinct value in the active immunization of susceptible individuals against diph-

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theria with mixtures of toxin-antitoxin, and in the diagnosis of clinically doubtful cases of diphtheria."—Text of a circular of information issued by the department of health, city of New York.

As supplied by most manufacturers, the Schick test outfit consists of a tube of diphtheria toxin and a vial containing a measured amount of sterile salt solution. By mixing the contents of the capillary tube with the saline a solution is obtained which is ready to be injected into the skin.

The following is the text of directions given by a manufacturer for the use of the Schick test outfit:

"Break off one end of the capillary tube, push the broken end carefully through the neck of the rubber bulb until it punctures the diaphragm within and enters the cavity of the bulb; then break off the other end of the tube. Hold the bulb between thumb and middle finger, place the index finger over the opening in the larger end of the bulb and expel the toxin into the 10 cc. of saline. Rinse out the capillary tube by drawing up saline several times, then cork the bottle and shake the diluted toxin. Inject 0.1 cc. or 0.2 cc., representing 1/50 M. L. D. for the guinea pig, *intracutaneously* on the flexor surface of the forearm or arm. The contents of the bottle are sufficient for about 35 tests. On account of the fairly rapid deterioration, it is not advisable to use the diluted toxin after 12 to 24 hours. The outfit must be kept very cold to prevent deterioration.

"A uniform technique in the intracutaneous injection is essential in the Schick test. A good guide for the insertion of the needle into the proper layer of the epidermis is to be able to see the oval opening of the needle through the superficial layers of cells. A definite wheal-like elevation, with the distinct markings of the openings of the hair follicles, shows that the injection has been made properly and that the fluid is confined to a small area of the epidermis. Here it will exert its irritant action, if the individual tested is not immune to diphtheria.

"Syringes and needles: Preferably a 1 cc. 'Record' tuberculin syringe and a fine platinum-iridium or steel needle. An ordinary hypodermic syringe with a fine steel needle may be used in emergencies."

ACTIVE IMMUNIZATION.

After discovering susceptible individuals by means of the Schick test, the question at once arises as to how best to immunize these individuals. The protection afforded by injections of diphtheria antitoxin is of very short duration, three or four weeks being the usual period. Far more lasting is the protection afforded by active immunization. During the past three years Park and his coworkers have employed active immunization with toxin-antitoxin mixtures in the case of over 4,000 susceptibles (including 1,000 infants under 1 week old), without the subsequent occurrence of a single case of

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diphtheria. Park summarizes his observations as to the value of this active immunization as follows:

The procedure is absolutely harmless. No reaction develops in infants, while in older children and adults a moderate swelling of the arm may appear and last for from one to three days.

One injection gives immunity to 80 per cent of those previously susceptible; two injections give immunity to 90 per cent; and three injections to 97 per cent.

The immunity conferred lasts for at least three years and probably much longer.

No diphtheria has occurred in those so far immunized.

In order to facilitate active immunization by practicing physicians, several establishments making biological products put up small vials containing a mixture of diphtheria toxin-antitoxin. This mixture is used undiluted. The dose is 1 cc. injected subcutaneously in the arm at the insertion of the deltoid. The injection is repeated at weekly intervals until three injections have been given. For children under 1 year of age the dose is 0.5 cc. In the younger children the local and constitutional symptoms following the injections of toxin-antitoxin are much less marked than in older children and adults. The difference is due to a greater susceptibility of the older children to the diphtheria bacillus protein, which is present in the mixture of toxin-antitoxin.

Determining the Effect of Active Immunization.

The development of an active immunity is determined at the end of three months by means of the Schick test. It has been found that the development of antitoxin in many individuals is often a slow process requiring from 8 to 12 weeks before a sufficient amount is produced to inhibit the Schick reaction. The number of successfully immunized individuals who will show a negative Schick retest after three injections of toxin-antitoxin will be, in different groups, from 90 to 99 per cent.

Indications for Active Immunization with Toxin-Antitoxin.

The use of toxin-antitoxin for active immunization may be considered under two heads.

1. *As a general prophylactic measure.*—The most suitable age period for testing and immunizing is between 6 months and 2 years. At this time of life the percentage of positive Schick reactions is largest and the susceptibility to diphtheria as well as the mortality from the disease is greatest. Children of this age period can be reached in the homes, in infant asylums, in the milk stations, and day nurseries. The children of the next age period are included in the preschool groups. These children can be reached in the public

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schools, in orphan asylums, and in the various other institutions. Among adults, those who come in contact with diphtheria and are constantly exposed and in danger should also be tested and immunized with toxin-antitoxin if found to give a positive Schick reaction. Included in this group are especially physicians, nurses, and hospital attendants in contagious disease hospitals.

2. *To control an outbreak of diphtheria.*—As the immunity arising from an injection of toxin-antitoxin does not develop until the lapse of from 2 to 12 weeks, active immunization can not be utilized to protect persons from exposure within that period. In institutions, however, where small outbreaks of diphtheria have occurred, or where diphtheria is more or less constantly present and clinical cases and bacillus carriers steadily appear, the use of antitoxin alone has often been insufficient to stamp out the disease, but the combined application of the Schick test and active immunization with toxin-antitoxin has given successful and encouraging results. Toxin-antitoxin immunization should not be used with antitoxin immunization in the same individual, as the surplus antitoxin tends to prevent the development of an active immunity.

BIOCHEMICAL STUDIES OF THE SALIVA IN PELLAGRA.

By M. X. Sullivan, Biochemist, and K. K. Jones, Food Analyst, Pellagra Hospital, United States Public Health Service, Spartanburg, S. C.

It is well established that in pellagra the alimentary tract is involved. Of the digestive tract, the oral cavity is of considerable importance in the diagnosis of pellagra, since the condition of the tongue is of much significance. The true pellagra tongue is vividly red and more or less swollen. Other parts of the oral cavity are likewise involved.

Since the oral cavity is of importance in the diagnosis of pellagra, a reconnoissance survey of the mixed saliva of individual pellagrins was started to determine wherein, if at all, the saliva, from a biochemical standpoint, differs from that of normal individuals. The study of the saliva included the rate of flow, the specific gravity, the total solids, the ash, the diastatic power, mucin, sulphocyanate, and abnormal constituents such as urea, uric acid, phenols, and indican.

The patients were inmates of the pellagra hospital of the United States Public Health Service at Spartanburg, S. C. Cases of pellagra reported by the medical staff as uncomplicated were taken for study. The work began April 12, 1917, and continued to June 19, and covered all practically uncomplicated cases of pellagra in the hospital during that period. During the time the saliva study was going on, only six of the patients, cases 294, 297, 303, 325, 327, and 338 were

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considered severe cases of pellagra; the rest were mild cases, or were improving rapidly. The patients were on a fixed ration, and the actual consumption within the ration was carefully recorded from day to day. Barring complicating ailments, the treatment in the hospital was altogether dietary.

With one or two exceptions where special diets were used, the rations employed were diets F, G, or B. On admission, the patients, as a rule, were placed on diet G or F and, subsequently, on diet B. These diets were as follows:

Food.	Diet F.	Diet G.	Diet B.	Food.	Diet F.	Diet G.	Diet B.
	Grams.	*Grams.*	*Grams.*		*Grams.*	*Grams.*	*Grams.*
Beef	100	100	100	Grits	50	50	.....
Milk	cc. 400	cc. 400	cc. 1,000	Turnip tops, spinach, collards, or cabbage	50	50	.....
Egg	.....	.....	100	Beets or turnips	50	50	.....
Ham	25	25	.....	Prunes or apples	60	50	50
Wheat bread	300	300	300	Black-eyed field pea	50	.....	.....
Butter	45	45	45	Pork fat	20	.....	.....
Orange juice	cc. 50	cc. 50	cc. 50	Sugar	20	20	20
Irish potato	100	100	150	Coffee	cc. 150	cc. 150	cc. 150
Mush	50	50	50				

When possible, the saliva was collected shortly after the patient had entered the hospital, and then once or twice a week until June 19. In some cases considerable time elapsed between the admission of the patient and the taking of the first sample of saliva. This delay was due either to the patient's condition or to the nondetermination as to whether or not there were complicating ailments. Three of the hospital staff served as controls.

The rate of flow was determined by the time (in minutes) required to deliver 50 cc. of saliva; the total solids by drying to constant weight at 100° C.; the ash, in the customary way, in platinum; the mucin, by precipitating with 1 per cent acetic acid; the sulphocyanate, by 5 per cent ferric chloride and 1 per cent hydrochloric acid in the spot plate and in test tubes, and in selected cases by the Rupp and Schied,[1] Thiel,[2] iodometric method; phenol and uric acid by Folin and Denis's[3] phenol and uric acid reagents; indican by means of Obermayer's reagent; the diastatic power by determining gravimetrically by Fehling's solution, the sugar formed by 1 cc. of saliva acting on 25 cc. of a 1 per cent starch paste at 50° C. for 15 minutes. In view of the fact that Hunter, Givens, and Lewis[4] found that 52 per cent of the patients studied by them showed an entire absence of free HCl in the gastric contents, the question as to whether or not the diastatic power of the saliva was lacking became of greater interest.

[1] Berichte d. d. chem. Gesell. XXXV, 2191, 1902.
[2] Ibidem, 2766.
[3] Jour. Biol. Chem. 12, 239, 1912.
[4] Bull. 102, Part II. Hygienic Laboratory, U. S. P. H. S., Treasury Department, 1916.

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Rate of flow.

The rate of flow was determined under the stimulus of chewing paraffin. In order to avoid any effect that the taking of food might have on the rate or the constituents of the saliva, all collections were made between 10 and 11 a. m., or from three to three and one-half hours after breakfast and from one to two hours before the midday meal. Before beginning the collection of the saliva, the mouth and teeth were washed with a small amount of water and also with the first few cc. of saliva formed under the stimulus of chewing paraffin. The rate of flow was found to vary greatly from individual to individual, and even in the same individual from time to time.

Leaving out of consideration case 296, who had a very scanty flow - practically none—the rate of flow of 38 hospital patients at the start of the testing varied from 10 to 126 minutes, with an average of 29.9 minutes. Leaving out case 525, who was in a weak condition, and required 63 minutes to give 25 cc., or 126 minutes (estimated) to give 50 cc., the average for 37 patients for the first test made in each case was 27.4 minutes. Of the 13 cases under study for at least three weeks, with more or less improvement in general health, the rate of flow varied from 13 to 39 minutes for 50 cc., with an average of 26.5 minutes. The rate of flow of eight normal people, as determined by 57 tests, made from 1 to 17 times on the individual, was found to vary from 14 to 50 minutes, with an average of 26.6 minutes.

The pellagrins may be grouped into two classes: (*a*) Those who had more or less soreness of the mouth and tongue at the time the first test was made, and (*b*) those who, irrespective of a previous history of such symptoms, had no mouth symptoms at the time of testing. In the 15 cases with mouth symptoms, the rate varied from 10 to 35 minutes, with an average of 21.7 minutes. In the 23 cases with no mouth symptoms, the rate varied from 15 to 126 minutes, with an average of 35.2 minutes. Four of the cases with definite tongue and mouth symptoms (cases 297, 300, 323, and 332) gave 50 cc. in 10, 12, 12, and 14 minutes, respectively. One case, number 298, with no history of mouth symptoms, gave 50 cc. of a grayish, viscous saliva in 15 minutes. In general, however, it would seem that the quantity of saliva secreted is increased at the time the tongue and mouth are involved. The relation between the rapid rate of flow and soreness of the tongue and mouth is brought out clearly by case 303. On April 20, one day after admission to the hospital, the tongue, though thickened, was not sore; nor was the mouth. The rate of flow was 27 minutes. On May 1 and May 4, the tongue was red and sore, and the rate of flow was 13 minutes and 15 minutes, respectively. On June 5, the tongue was normal and the rate was 22 minutes for 50 cc. The connection between a sore, over-red tongue and the rate of

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flow is not as definite, however, as it might be, for cases were found (such as case 300) where the rapid rate of flow persisted long after the mouth symptoms had disappeared. Again, the patient may have tongue and mouth symptoms with a fairly slow rate of flow, as obtained in cases 294 and 327 where 35 and 34 minutes, respectively, were required to deliver 50 cc. Leaving out the four cases with mouth symptoms and very rapid flow, the average for the other 11 cases with sore mouth was 25.3 minutes for 50 cc.

Considering the great variation in the flow of the saliva in normal people, the study of the salivary flow in the cases of pellagra at this hospital simply warrants the conclusion that, in general, the rate of flow of the cases studied varies on the whole within normal limits. In occasional cases, with mouth symptoms, the flow may be abnormally fast. In other cases, it may be abnormally slow.

The saliva of many of the pellagrins was more turbid, more ropy, and more viscous than that of the controls—suggestive of sympathetic saliva described by Schulz.[1] With improvement in the general condition of the patient, the ropy, or viscous quality of the mixed saliva became less marked. Since the rate of flow as determined by the time to give a definite amount of saliva did not agree with the patient's belief that there was an increased amount of saliva in the mouth or with the observer's judgment on this point from the amount of spitting made by the patient, the conclusion must be drawn that the salivation spoken of in the literature as occurring in pellagra is not always a true salivation with a greater volume of saliva, but, rather, is often an apparent salivation due to some inhibition of swallowing combined with a physical change in the saliva from a nonropy, or slightly ropy, thin flowing type such as occurs in normal people to a more ropy kind which makes the presence of saliva in the buccal cavity more obvious.

The Specific Gravity of the Mixed Saliva in Pellagra.

According to Hammarsten and Hedin,[2] the specific gravity of mixed saliva varies from 1.002 to 1.008. According to Fleckseder[3] the clear saliva varies from 1.0025 to 1.004. The specific gravity of the unfiltered saliva of the controls as determined here by means of a Boot vacuum space specific gravity bottle was found to vary from 1.0019 to 1.0039, with an average for a month's testing of 1.0029. The determination of the specific gravity was made immediately after the saliva was collected.

The variation for 22 cases of pellagra in which the specific gravity was determined was from 1.0024 to 1.0078 with an average for all

[1] C. Oppenheimer. Handbuch der Biochemie des Menschen und der Tiere. III, I, 44, 1910.
[2] A Textbook of Physiological Chemistry, 8th ed., translated by Mandel, 1915, 455.
[3] Zeitschrift f. Heilkunde, Abtheil f. interne Medizin 7, 230, 1906.

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determinations of 1.004. As compared with the controls, the specific gravity of the saliva of pellagrins tends to be slightly higher, but still within normal limits.

The Total Solids of the Saliva in Pellagra.

The dry matter of mixed human saliva, according to Schulz [1] varies from 0.5 to 1 per cent or between 5 and 10 parts per thousand. The average of the first determination for the controls was 4.79 parts per thousand. The average of the first determinations for the pellagrins was 6.79 parts per thousand. The average for those with mouth symptoms was 6.70 parts per thousand; of those without mouth symptoms, 6.88 parts per thousand. The average of three controls for 16 distinct sets of analyses over a period of two months was 5.05 parts per thousand; of 22 pellagrins, 6,67 parts per thousand. The total solids of the saliva of four pellagrins were the same as, or only slightly above, that of the three controls. Of the other 18 cases the average total solids were 6.97 parts per thousand. The saliva of pellagrins, then, had a tendency toward a greater quantity of total solids than the saliva of the controls had. From the beginning of the experiment to the end no rule was observed in the increase, or decrease, in the total solids, so food changes played little part.

The Ash of the Saliva.

The ash of the controls at the beginning of the experiment was 2.4, 2, and 2.3 parts per thousand. The ash of one pellagrin who had been in the hospital four months and showed but slight, if any, evidence of pellagra, was 2.3 parts per thousand. Three other of the pellagrins showed 2.4, 2.4, and 2.6 parts per thousand, respectively. In the other 18 cases of pellagra studied in the hospital, the ash was higher than it was in the controls, and varied from 3.2 to 5.1, with an average of 3.63 parts per thousand. Taking all cases, the average of the first determination is practically the same for those with mouth symptoms as for those without—3.4 and 3.25 parts per thousand, respectively. Throughout the experiment the saliva of the hospital patients tended to have a higher ash content than the saliva of the controls. The average of the controls for 13–14 determinations over a period of two months was 2.68 parts per thousand. The individual averages of the pellagrins in from 3 to 11 determinations varied from 2.31 to 4.73 parts per thousand, with a general average of 3.48 parts per thousand.

Organic Matter of the Saliva.

The difference between the total solids and ash was called organic matter. The variation in the controls for the first determination was from 2.19 to 2.97 parts per thousand, with an average of 2.69. The organic matter of the saliva of 22 pellagrins in the first determination

[1] Handbuch der Biochemie des Menschen und der Tiere. Oppenheimer III, Theil 1, 27, 1909.

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varied from 1.63 to 5.72 parts per thousand, with an average of 3.39. The average of all determinations during the two months was 2.37 parts per thousand for the controls, 3.19 parts per thousand for the hospital patients.

The Diastatic Power of the Saliva in Pellagra.

The diastatic power was measured by determining the quantity of sugar formed by 1 cc. of natural mixed saliva acting upon 25 cc. of starch paste for 14 minutes. The starch paste was made by stirring cornstarch with cold water, adding the mixture to boiling water while stirring, boiling for two minutes, and cooling in an ice box for a time and then at room temperature. Then the volume was made such that 100 cc. of the paste contained 1 gram of starch.

Evans[1] considers that for salivary amylase the optimum concentration of starch is about 3 per cent and the optimum temperature 6° C. The reaction, he says, comes to equilibrium when 81 per cent of the starch has been converted to maltose. Kjeldahl, referred to and verified by Fleckseder,[2] found that with 0.5 to 2 cc. of saliva acting on 100 cc. of a 1 per cent starch paste for 15 minutes, the amount of reducing sugar formed is directly proportional to the amount of active amylase. According to Slosse and Limbosch[3] the rate of digestion by ptyalin increases from 40° C. to 58° C., and then rapidly falls off. At 70° C. it is stopped altogether.

In our work 25 cc. of freshly made starch paste were placed in a 50 cc. beaker and brought to 50° C. in a water bath maintained at that temperature. Six beakers properly labeled with the case number or name were placed in the bath at a set. When the desired temperature, 50° C., had been secured, 1 cc. of the respective saliva was added at intervals of one minute. At the end of 14 minutes' digestion each beaker was placed on a hot plate and the contents of the beaker were brought rapidly to approximately 85° C. to destroy the sugar-forming enzyme. Precautions were taken to keep the conditions the same for each and every case. The digestion mixtures were allowed to cool and were then filtered through paper. The paper was then thoroughly washed and the volume of the filtrate and washings brought to exactly 50 cc. in volumetric flasks. The reducing power of 10 cc. of the solution was estimated gravimetrically, using Soxhlet's modification of Fehling's solution, with attention paid to details of preparation of solutions, asbestos mats, and time of boiling, as given in Bulletin 107 (revised), United States Department of Agriculture, 1908, pages 42, 241, and 242. The solutions of copper and alkaline tartrate were filtered through well-treated asbestos until clear, and were always freshly made. Fifteen cc. of the mixed

[1] J. Physiol. 44, 191, 1912.
[2] Zeitschr. f. Heilkunde, Abtheil. f. interne Medizin. 7, 242, 1906.
[3] Arch. intern. Physiol. 6, 635; C. A. 2, 3238, 1908.

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ngue, or burning in the buccal cavity, cause no consistent varia-
on in the diastatic power of the saliva. In no case, whether the
ow was very scanty or very copious, was the diastatic power lacking.

TABLE I.—*Diastatic power of 1 cc. of saliva in mgs. of Cu_2O.*

Case.	Date admitted.	Condition at start of experiment.	Date of test.									Average.
			Apr. 12.	Apr. 16.	Apr. 20.	Apr. 24.	May 8.	May 22.	May 29.	June 5.	June 19.	
ntrol 1			172	98	182	137	121	143	148	.....	113	139.3
ntrol 2			148	135	187	133	168	157	173	140	160	156.6
ntrol 3			172	286	185	129	149	150	159	130	.....	170.0
.....	Oct. 25, 1916	Mild	158	203	.....	.....	.....	.....	.....	.....	.....	180.5
.....	Dec. 5, 1916	.....do	168	203	203	149	166	182	196	121	.....	174.0
.....	Apr. 3, 1917	Severe; sl. M. S.[1]	177	162	183	.....	.....	.....	.....	.....	.....	174.0
.....	Apr. 11, 1917	Severe; M. M. S.[2]	147	175	165	161	134	79	.....	.....	.....	143.5
.....	Apr. 12, 1917	Mild	.....	191	179	250	154	176	.....	.....	.....	190.0
.....	Apr. 19, 1917	Severe; M. M. S.[2]	.....	.....	181	153	170	150	130	111	.....	149.2
.....	Apr. 16, 1917	Mild	.....	.....	199	180	181	195	.....	.....	.....	188.8
.....	.....do	Mild; sl. M. S.[1]	.....	.....	.....	162	145	183	.....	144	143	155.4
.....	Apr. 25, 1917	Mild	.....	.....	.....	.....	176	184	177	101	.....	159.5
.....	May 2, 1917	.....do	.....	.....	.....	.....	.....	204	126	89	.....	139.7
.....	Apr. 18, 1917	.....do	.....	.....	.....	.....	.....	197	156	.....	.....	176.5
.....	Apr. 20, 1917	.....do	.....	.....	.....	.....	.....	166	.....	.....	.....	166.0
.....	May 2, 1917	.....do	.....	.....	.....	.....	.....	182	164	135	157	159.5
.....	May 1, 1917	.....do	.....	.....	.....	.....	.....	237	244	228	121	207.5
.....	Apr. 30, 1917	Mild; sl. M. S.[1]	.....	.....	.....	.....	.....	218	179	159	.....	185.3
.....	Apr. 13, 1917	Mild	.....	.....	.....	.....	.....	211	150	175	.....	178.7
.....	May 12, 1917	.....do	.....	.....	.....	.....	.....	221	157	151	156	171.3
.....	May 22, 1917	Mild; sl. M. S.[1]	.....	.....	.....	.....	.....	213	83	114	116	131.5
.....	May 27, 1917	Severe; M. M. S.[2]	.....	.....	.....	.....	.....	.....	158	164	148	156.7
.....	May 26, 1917	Severe; sl. M. S.[1]	.....	.....	.....	.....	.....	.....	175	180	.....	177.5
.....	May 27, 1917	Mild; sl. M. S.[1]	.....	.....	.....	.....	.....	.....	197	.....	.....	197.0
.....	May 24, 1917	Mod.; M. M. S.[2]	.....	.....	.....	.....	.....	.....	163	206	91	153.3
.....	June 4, 1917	Marked; sl. M. S.[1]	.....	.....	.....	.....	.....	.....	.....	215	124	169.5
.....	June 2, 1917	Mild	.....	.....	.....	.....	.....	.....	.....	.....	169	169.0
.....	June 15, 1917	Mild; sl. M. S.[1]	.....	.....	.....	.....	.....	.....	.....	.....	134	134.0
.....	June 1, 1917	Mild	.....	.....	.....	.....	.....	.....	.....	.....	139	139.0
.....	June 4, 1917	Mild; sl. M. S.[1]	.....	.....	.....	.....	.....	.....	.....	.....	147	147.0
.....	May 20, 1917	Mild	.....	.....	.....	.....	.....	.....	.....	.....	154	154.0
.....	June 6, 1917	Mild; sl. M. S.[1]	.....	.....	.....	.....	.....	.....	.....	.....	147	147.0
.....	June 13, 1917	Severe; M. M. S.[2]	.....	.....	.....	.....	.....	.....	.....	.....	178	178.0

[1] Sl. M. S.=slight mouth symptoms. [2] M. M. S.=marked mouth symptoms.

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...den,[2] who found no evidence that, in man, even years of exclu-
... meats and greatly increased carbohydrate in the food would
...iably increase the ptyalin concentration.

Mucin.

...he beginning of the saliva study mucin was precipitated by
...g 25 cc. of saliva into 100 cc. of 95 per cent alcohol. This
...d, however, was abandoned because it was concluded that the
...l precipitated other matter than mucin. Accordingly, about
...weeks after the start of the study of the saliva, mucin was pre-
...ted by adding 25 cc. of saliva to 50 cc. of 1 per cent acetic acid.
...verage mucin precipitated from the saliva of three controls by
...ethod varied in 9 to 10 determinations from 84.4 to 104.8 mgs.
...0 cc. with a general average of 91.7 mgs. The average mucin
... saliva of 21 hospital patients varied from 68 to 202 mgs. per
...c. with an average of 126 mgs. Only four of the cases were
...d as severe cases of pellagra. Of these severe cases the mucin
...ged 109.6 mgs. per 100 cc.

...en the pellagrins were grouped into those who at the start of
...sting, or during it, had some soreness of the mouth and tongue,
...hose who showed no mouth symptoms, it was found that the
...r group averaged 115.3 mgs. per 100 cc., while the latter aver-
...132.4 mgs. The mucin precipitated from saliva by dilute acetic
...s, then, greater for the saliva of pellagrins than for the controls,
...he increased amount of mucin is not tied up with the severity of
...eneral pellagra symptoms or with the mouth symptoms.

J. Physiol. path. gén. 9, 261, 1907.
Virchow's Archiv. CIX, 35, 1887.
Jour. Amer. Med. Assoc. 66, 930, 1916.
Wien. klin. Wochschr. 26, 1307, 1914.
Proc. Soc. Exp. Biol. Med. 7, 52, 1909-10.

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Sulphocyanates.

Sulphocyanate is an almost constant constituent of human saliva. In starting the study of the sulphocyanates, it was intended to make use of the iodometric method utilized by Rupp and Schied [1] and improved by Thiel,[2] a quantitative method which Gies and his collaborators[3] found very satisfactory. On making qualitative tests with the salivas with ferric chloride, followed by dilute hydrochloric acid, it was found that the saliva of normal people gave a striking pink or blood-red color with the reagents, while the saliva of the pellagra patients gave a slight yellow, or barely perceptible shade of pink.

The striking contrast of the saliva of pellagrins with that of normal people in the reaction with the ferric chloride brought us to the conclusion that this test would allow us to test out the sulphocyanate reaction in a great many cases and to decide definitely whether or not sulphocyanate is, in general, decreased in pellagra. By the ferric-chloride hydrochloric-acid test on the spot plate the senior author found it possible to detect very readily the presence of 0.4 mgs. of potassium sulphocyanate in 100 cc. of distilled water or saliva, so that it is certain that a saliva which gives no reddish shade of color with the ferric chloride and hydrochloric acid on the spot plate has less than 0.0004 per cent of sulphocyanate calculated as potassium sulphocyanate.

By means of test tubes and color comparison with water, ferric chloride, and hydrochloric acid, 0.000025 per cent or one part of potassium sulphocyanate can be detected in 4,000,000 parts of distilled water, as Perlzweig and Gies [4] claim.

It was intended to make as many tests as possible with the qualitative and roughly quantitative ferric chloride and hydrochloric acid reagents to determine whether or not the saliva of pellagrins is predominantly lacking in sulphocyanate as compared with nonpellagrins and then to utilize the precise Rupp-Schied-Thiel method to make a quantitative expression of the difference between the saliva of pellagrins and that of normal people. As stated above, however, the contrast between the reaction of the saliva of pellagrins and that of normal people was found so striking that the ferric chloride-hydrochloric acid test alone was employed for the comparison.[5]

A small amount of fresh saliva was placed in the cup of a porcelain spot plate, a drop or two of 5 per cent ferric chloride added, the mixture stirred with a drop or two of 2 per cent hydrochloric acid. Ferric chloride gives a red color with a number of substances, such as formic,

[1] Berichte d. d. chem. Gesell. XXXV, 2191, 1902.

[2] Ibidem. 2766.

[3] Gies and Kahn, Dental Cosmos LV, 40, 1913. Gies, Lieb, and Kahn, Ibidem. LVI, 175, 1914.

[4] Biochem. Bull. IV, 206, 1915.

[5] In a number of cases studied subsequently to the work detailed herein, the Rupp-Schied-Thiel method was used, and although the patients were well on the road to recovery and some were about to be discharged, the sulphocyanate content of the saliva was found, in general, less than in normal people.

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d. To 5 cc. of several standards and to 5 cc. of the saliva, a 5 per cent ferric chloride solution and 0.5 cc. of 1 per cent oric acid are added. By comparison with the standard sul- ate colors so developed, an approximate determination of ocyanate calculated as the potassium salt can be arrived at. cases of pellagra, tested in the hospital, 32 gave no percept- or red color with ferric chloride with or without the addition chloric acid; 4 gave only a faintly positive test such as given arts per million of sulphocyanate; and 4 gave a decidedly test varying, as judged by potassium sulphocyanate stand- m 20 parts per million to 90 parts per million. Of the pa- ving a strong, positive reaction for sulphocyanate, cases 329 were mild cases of pellagra in well-nourished condition; had been in the hospital one month before the test was made, in good condition; while case 519 was a residual case of hysique.

normal people tested, male and female, black and white, s of the hospital staff, attendants, and visitors to the hospital, decidedly positive. Compared under similar conditions with made standard colors, representing known concentrations of m sulphocyanate, the variation of the sulphocyanate of the 10 normals was from 20 parts to 160 parts per million with age of 60 parts per million, or 0.006 per cent

gh but roughly quantitative, the study of the sulphocyanate reaction with ferric chloride and hydrochloric acid showed general, the saliva of pellagrins contains a lessened amount ocyanate than normal saliva does. Probably none of the

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of sulphocyanate in his saliva over a period of three months and in many tests. The question is still under study.

Phenols and Uric Acid.

The saliva of 3 controls and of 16 patients was tested twice over a week's interval with Folin and Denis's phenol reagent and uric acid reagent. All the saliva gave a more or less blue color with the phenol reagent. As determined by means of a Duboscq colorimeter, the phenol of the saliva of pellagrins was sometimes greater than normal, sometimes less. The color with the uric acid reagent was always slight, but much more evident for the saliva of the pellagra patients than for the three controls.

Indican.

While making a routine test of the urine of patients, Dr. C. H. Waring, assistant surgeon, found the urine of case 313 to be very high in indican. Accordingly, tests were made of the saliva by means of Obermayer's reagent and chloroform. Once the chloroform was blue with indigo blue and once red with indigo red. No other saliva showed the presence of appreciable amounts of indican. It may be noted that shortly after the discovery of indican in his saliva, case 313 was judged to be suffering from tuberculosis also, from which disease he died about a month later. What part the tuberculosis played in the presence of indican in the saliva can not be told.

[1] For the pharmacological action of sulphocyanate see Gies, Lieb, and Kahn. Dental Cosmos LVI, 175, 1914.

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2 per cent. It is certain that the alkalinity of the saliva of spital patients is greater than that given by the authorities . (A comparative study of the saliva of pellagrins and of persons is being made.) The data on the reaction is given le II.

E II.—*Reaction of the saliva of pellagrins in percentage of sodium carbonate.*

Case.	Percentage of sodium carbonate.				Case average.	Days under treatment.
	July 19.	July 20.	July 21.	July 22.		
	0.16	0.172	0.17	0.17	0.1655	5
	.14	.136	.11	.13	.129	22
	.11	.103	.14	.12	.118	43
	.14	.160	.14	.15	.1475	51
	.19	.172	.15	.17	.17	6
	.15	.14	.13	.14	.14	22
	.14	.14	.14	.14	.14	3
	.12	.126	.13	.13	.1265	34
	.09	.088	.09	.09	.09	3
	.18	.176	.15	.17	.169	6
	.20	.198	.18	.19	.192	54
	.12	.118	.11	.12	.117	18
	.12	.13	.13	.13	.1275	3
	.11	.114	.10	.11	.1085	9
	.15	.135	.....	.14	.1416	33
	.17	.146	.13	.15	.149	22
	.21	.212	.23	.22	.218	6
	.15	.162	.16	.14	.153	20
	.10	.078	.07	.08	.082	25
y average	.145	.1424	.1361	.1416	.1413	.....

Amer. Chem. Jour. IV, 329, 1882.
Transact. Connecticut Acad. 6, 343, 1885.
[8] Virchows Arch. cxxv, 146, 340, 1891.

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Summary.

The rate of flow of the saliva of patients at the Pellagra Hospital was found to be occasionally very rapid, occasionally very slow, but in general it was within normal limits.

The specific gravity of the saliva of pellagra patients tends to be higher than that of the controls.

The total solids, ash, organic matter, and mucin of the saliva are greater for the pellagrins than for the controls, but bear no relation to the mouth symptoms.

The diastatic power of the saliva of pellagrins varies within the limits established by the controls.

The sulphocyanate content is much less marked in the saliva of the pellagra patients than in that of normal people.

The reaction of the saliva in pellagra is somewhat more alkaline than is that of normal saliva.

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DEATHS DURING WEEK ENDED MAY 3, 1919, IN CITIES.

The table following shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined, in certain large cities of the United States during the week ended May 3, 1919.

The data are taken from the "Weekly Health Index," May 6, 1919, issued by the Bureau of the Census, Department of Commerce.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended May 3, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	33	15.3	C 13.4	11	5.1
Atlanta, Ga.	201,732	58	15.0	C 18.9	.....	.....
Baltimore, Md.	[2] 669,981	223	17.4	A 19.1	25	1.9
Boston, Mass.	785,245	259	17.2	A 17.5	43	2.9
Buffalo, N. Y.	473,229	123	13.6	C 14.7	.....	.....
Cambridge, Mass.	111,432	26	12.2	A 14.6	.....	.....
Chicago, Ill.	2,596,681	605	14.0	A 16.1	88	1.8
Cincinnati, Ohio.	418,022	121	15.5	C 18.3	12	1.5
Cleveland, Ohio.	810,396	212	13.6	C 14.2	45	2.9
Columbus, Ohio.	225,296	65	15.0	C 14.1	5	1.2
Dayton, Ohio.	130,655	32	12.8	C 13.2	5	2.0
Denver, Colo.	.....	53	.....	.....	.....	.....
Fall River, Mass.	128,392	40	16.2	C 16.2	.....	.....
Grand Rapids, Mich.	135,460	42	16.2	C 14.6	.....	.....
Indianapolis, Ind.	299,577	86	15.5	C 23.0	.....	.....
Kansas City, Mo.	313,785	99	16.5	C 16.8	21	3.5
Los Angeles, Calif.	568,495	132	12.1	A 13.0	14	1.3
Louisville, Ky.	242,707	62	13.3	C 14.4	7	1.5
Lowell, Mass.	109,081	33	15.8	A 15.5	3	1.4
Memphis, Tenn.	154,769	63	21.2	C 20.9	4	1.3
Milwaukee, Wis.	453,491	123	14.1	A 14.6	51	5.9
Minneapolis, Minn.	383,442	89	12.1	C 13.7	.....	.....
Nashville, Tenn.	119,215	46	20.1	C 21.4	9	3.9
Newark, N. J.	428,684	106	12.9	C 14.2	.....	.....
New Haven, Conn.	154,865	30	10.1	C 19.5	.....	.....
New Orleans, La.	382,273	120	16.4	A 18.2	.....	.....
New York, N. Y.	5,215,879	1,455	14.5	C 15.8	259	2.6
Oakland, Calif.	214,306	47	11.4	A 10.0	.....	.....
Omaha, Nebr.	180,264	41	11.9	C 11.6	.....	.....
Philadelphia, Pa.	1,761,371	472	14.0	[3] 16.6	64	1.9
Pittsburgh, Pa.	598,303	194	17.1	C 22.0	58	5.1
Portland, Oreg.	.....	68	.....	.....	10	.....
Providence, R. I.	263,613	71	14.0	C 12.7	9	1.8
Richmond, Va.	160,719	45	14.6	C 19.8	4	1.3
Rochester, N. Y.	264,856	76	15.0	C 12.6	19	3.7
St. Louis, Mo.	779,961	185	12.4	C 18.0	24	1.6
St. Paul, Minn.	257,699	76	15.2	C 14.6	.....	.....
San Francisco, Calif.	478,530	150	16.3	C 14.6	24	2.6
Seattle, Wash.	.....	74	.....	.....	19	.....
Spokane, Wash.	.....	28	.....	.....	.....	.....
Syracuse, N. Y.	161,404	56	18.1	C 16.5	7	2.3
Toledo, Ohio.	262,234	62	12.3	A 14.5	10	2.0
Washington, D. C.	401,681	116	15.1	A 16.7	5	.7
Worcester, Mass.	175,650	65	19.5	C 16.8	.....	.....

"A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED MAY 10.

CAMP DIX ZONE, N. J.

	Cases.
Tuberculosis:	
Pemberton Township	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chancroid	1
Gonorrhea	4
Influenza	1
Measles	2
Smallpox	3
Syphilis	1

CAMP FUNSTON ZONE, KANS.

Chicken pox:	
Manhattan	6
Diphtheria:	
Manhattan	1
Ogden	2
Gonorrhea:	
Junction City	3
Manhattan	3
Mumps:	
Manhattan	6
Junction City	1
Ogden	5
Pellagra:	
Manhattan	1
Pneumonia, broncho:	
Randolph	1
Scarlet fever:	
Manhattan	2
Junction City	1
Ogden	1
Leonardville	3
Smallpox:	
Skiddy	1

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Chicken pox:	
Columbus	1
Gonorrhea:	
Columbus	8
Muscogee County	9
Phoenix City	1
Alabama	1
Measles:	
Columbus	2

GAS AND FLAME SCHOOL ZONE, GA. AND ALA. (con.

	Cases.
Smallpox:	
Bibb City	2
Columbus	2
Muscogee County	4
Syphilis:	
Alabama	3
Columbus	4
Muscogee County	4
Phoenix City	1
Tuberculosis:	
Columbus	1
Whooping cough:	
Columbus	1
Muscogee County	2

CAMP GORDON ZONE, GA.

Atlanta:	
Cerebrospinal meningitis	1
Chancroid	3
Chicken pox	15
Diphtheria	1
Gonorrhea	49
Influenza	2
Measles	12
Mumps	4
Pneumonia	3
Scarlet fever	3
Smallpox	28
Syphilis	34
Tuberculosis	5
Typhoid fever	1
Whooping cough	3

CAMP A. A. HUMPHREYS ZONE, VA.

Alexandria:	
Gonorrhea	2
Smallpox	1
Syphilis	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	9
Diphtheria	1
Influenza	1
Mumps	3
Scarlet fever	1
Smallpox	7

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nafly	1

PICRIC ACID PLANT ZONE, GA.

wick:	
umps	1
eumonia	1
philis	2
phoid fever	2

CAMP POLK ZONE, N. C.

n pox:	
rham	3
w Light Township	1
leigh	5
heria:	
leigh	1
rhea:	
rham	5
s:	
rham	7
s:	
rham	2
leigh	1
fever:	
leigh	1
ox:	
rham	2
hite Oak Township	2
is:	
rham	1
culosis:	
rham	4
leigh	1
ping cough:	
rham	16
rham Township	2
leigh	1

SOUTHER FIELD ZONE, GA.

No cases of communicable diseases reported.

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Cerebrospinal meningitis	1
Chicken pox	1
Diphtheria	3
Gonorrhea	6
Leprosy	1
Measles	2
Mumps	1
Syphilis	5
Tuberculosis	2

CAMP UPTON ZONE, N. Y.

Brook Haven:	
Measles	1
Pneumonia	1
Septic sore throat	1
Tuberculosis	2
Typhoid fever	1

WILMINGTON SANITARY DISTRICT, N. C.

Sea Gate:	
Tuberculosis	1
Typhoid fever	1
Wilmington:	
Gonorrhea	17
Measles	1
Mumps	2
Pellagra	1
Pneumonia	1
Scarlet fever	1
Syphilis	7
Tuberculosis	1

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DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended May 2, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week
Annual admission rate per 1,000 (all causes)	728.40	[illegible]
All troops in United States	1,408.57	[illegible]
American Expeditionary Forces	445.33	[illegible]
Annual admission rate per 1,000 (disease only)	685.27	[illegible]
All troopes in United States	1,316.11	[illegible]
American Expeditionary Forces	402.47	[illegible]
Noneffective per 1,000 on day of report	11.90	[illegible]
All troops in United States [1]	17.76	[illegible]
American Expeditionary Forces	35.72	[illegible]
Annual death rate per 1,000 (all causes)	6.35	[illegible]
All troops in United States [1]	9.39	[illegible]
American Expeditionary Forces	5.05	[illegible]
Annual death rate per 1,000 (disease only)	4.63	[illegible]
All troops in United States [1]	7.56	[illegible]
American Expeditionary Forces	3.79	[illegible]

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

Cases of special diseases reported during the week ended May 2, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
Bowie	1		2	26	6					4,971.12	[illegible]
Bragg			1							[illegible]	[illegible]
Custer	1			4	4					[illegible]	[illegible]
Devens	14			35		16	1	1		[illegible]	[illegible]
Dix	4			23			2		3	[illegible]	[illegible]
Dodge	3			6	4				3	[illegible]	[illegible]
Funston				5						[illegible]	[illegible]
Gordon	3			18		5				[illegible]	[illegible]
Grant				42	4				2	[illegible]	[illegible]
A. A. Humphreys				5	2				1	[illegible]	[illegible]
Jackson	1		2	13						[illegible]	[illegible]
Kearny				3	1					[illegible]	[illegible]
Henry Knox				4						[illegible]	[illegible]
Lee	1			26	8		1		1	[illegible]	[illegible]
Lewis	3			19	2		2		1	[illegible]	[illegible]
Meade	1			3				1	8	[illegible]	[illegible]
Pike			1	30	3					[illegible]	[illegible]
Shelby				17	14					[illegible]	[illegible]
Sherman	2			27	22	2			1	[illegible]	[illegible]
Zachary Taylor	2			6	3	1			1	[illegible]	[illegible]
Travis	1		1	6	3	1				[illegible]	[illegible]
Upton	1			43	7	9				[illegible]	[illegible]
Northeastern Department				1						[illegible]	[illegible]
Eastern Department	1		1	20	4	5				[illegible]	[illegible]
Southeastern Department				11	2					[illegible]	[illegible]
Central Department	5			5						[illegible]	[illegible]
Southern Department	5			52	5	3			1	[illegible]	[illegible]
Western Department	1			7	6	2	2			[illegible]	[illegible]
Aviation camps	4		1	24		2				[illegible]	[illegible]

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Cases of special diseases reported during the week ended May 2, 1919—Continued.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only.	Noneffective rate per 1,000 on day of report.
Port of embarkation:											
Hoboken	13	1	.....	16	7	24	3	2	1	3,721.68	93.23
Newport News	24	.....	.....	61	11	17	.....	3	1	5,287.39	103.40
Fort Monroe	1	.....	.....	8	.....	1	.....	.....	.....	604.18	25.30
Alcatraz Disciplinary Barracks	1	.....	.....	.....	.....	.....	.....	.....	.....	971.96	37.38
Leavenworth Disciplinary Barracks	.....	.....	.....	1	.....	.....	.....	.....	.....	1,104.27	42.78
Columbus Barracks	.....	.....	.....	2	2	.....	.....	.....	.....	931.89	38.53
Jefferson Barracks	.....	.....	.....	2	.....	.....	.....	.....	.....	2,424.47	111.70
Fort Logan	.....	.....	.....	2	2	.....	.....	.....	.....	1,999.99	46.43
Fort McDowell	1	.....	.....	1	.....	1	.....	.....	.....	1,832.89	44.38
Fort Sill	.....	.....	.....	1	1	.....	1	.....	.....	541.98	19.49
Fort Slocum	.....	.....	.....	.....	.....	.....	.....	.....	.....	677.08	24.73
Fort Thomas	.....	.....	.....	3	3	.....	.....	.....	.....	1,634.28	36.19
West Point	.....	.....	.....	.....	.....	.....	.....	.....	.....	530.93	16.21
Arsenals	.....	.....	.....	3	.....	1	.....	.....	.....	559.21	33.02
Miscellaneous small stations	.....	.....	1	4	.....	.....	.....	.....	.....	500.39	29.66
Total	89	1	10	589	126	90	12	7	24	1,468.57	57.76

Number of deaths at large camps in the United States week ended May 2, 1919.

Camp.	Strength.	Deaths. All causes.	Deaths. Disease only.	Camp.	Strength.	Deaths. All causes.	Deaths. Disease only.
Bowie	3,768	1	1	Sherman	13,604	1	1
Cragg	1,226	.....	.....	Taylor	9,140	1	1
Custer	5,833	.....	.....	Travis	4,930	1	1
Evens	21,895	2	2	Upton	27,447	2	1
Dix	12,048	.....	.....	Northeastern Department	3,014	1	1
Dodge	7,901	3	3	Eastern Department	16,005	.....	.....
Funston	5,501	1	1	Southeastern Department	7,222	.....	.....
Gordon	5,125	.....	.....	Central Department	4,626	2	2
Grant	9,027	1	1	Southern Department	31,415	4	3
Humphreys	2,723	.....	.....	Western Department	13,597	1	1
Jackson	6,217	1	1	Aviation camps	17,248	3	.....
Kearny	3,412	.....	.....	Ports of embarkation:			
Henry Knox	1,820	.....	.....	Hoboken	46,158	6	1
Lee	8,069	1	1	Newport News	23,802	4	4
Lewis	5,249	2	1	All others	87,629	38	34
Meade	11,494	.....	.....				
Pike	5,343	.....	.....	Total	426,056	77	62
Shelby	3,295	1	1				

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States. Current week.	Troops in United States. Last week.	American Expeditionary Forces. Current week.	American Expeditionary Forces. Last week.	Disease.	Troops in United States. Current week.	Troops in United States. Last week.	American Expeditionary Forces. Current week.	American Expeditionary Forces. Last week.
Pneumonia	10.86	6.76	10.25	12.03	Typhoid	0.12	0.0	0.84	0.38
Dysentery	.12	.24	.23	.12	Measles	1.46	2.09	3.04	2.73
Malaria	1.22	1.60	.37	.38	Meningitis	.85	.61	.84	.89
Venereal	71.65	63.49	40.01	37.14	Scarlet fever	2.92	2.70	.60	.89
Paratyphoid	.0	.0	.09	.12	Influenza	10.98	12.42	.....	.....

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CURRENT ST

Telegraphic Reports fr

Alabama.—State totals: Typ
measles 64, scarlet fever 5, d
monary tuberculosis 11, cer
chicken pox 4.

Arkansas.—State totals: M
cough 25, smallpox 21, measle
ingitis 4, scarlet fever 3, influen

California.—Influenza: Cases
in Oakland 6, San Francisco 7, L
3, San Bernardino County 2, Sali
Los Angeles County 1, and Dinuba
3, Los Angeles 8, San Bernardino
County reports 1 case of cerebrospi

Connecticut.—Cerebrospinal menin
State total: Influenza 31.

Florida.—State totals: Typhoid fe
malaria 8, influenza 11, dysentery 3,

Georgia.—State totals: Acute infe
worm 10, cerebrospinal meningitis 5,
dysentery 3, dysentery (amebic) —, G
142, influenza 39, malaria 89, measles
fever 2, pneumonia (acute lobar) 46, poli
septic sore throat 18, smallpox 113, syp
monary) 28, tuberculosis (other than pul
20, typhus fever 1, whooping cough 30.

Illinois.—Diphtheria: Cases reported 142,
Springfield 5. Scarlet fever: Cases reported
71, Oglesby 6, Rockford 6, Havana 5, Dix
reported 87, of which in Ullin precinct (Pula
9, Rock Island 8, Galesburg 7, Decker Townsh
7, Pekin 5, Bloomington 4, Dubois Township (
4, Aurora 3, Norris City 3. Meningitis: Chicago
myelitis: Chicago 3. Lethargic encephalitis: C
which in Bloomingdale 1, Ramsey 1, Tunnel Hill T
County) 1, Bath Township (Mason County) 1, Spr
enza: Cases reported 34, of which in Chicago 19.
syphilis 94.

Indiana.—Scarlet fever reports by towns: Elkhart,
Bend, Huntington, and La Fayette. Smallpox report
Grant, Owen, Elkhart, Kosciusko, Jay, and Clay. Di
by counties: Elkhart 6, Kosciusko 5, Hendricks 7,
Grant 1, Porter 1, Randolph 2, Wabash 1. Typhoid

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CEREBROSPINAL MENINGITIS—Continued.

State Reports for April, 1919.

Place.	New cases reported.
.....	1
.....	2
.....	1
.....	1
.....	1
.....	6
.....	1
.....	1
.....	3
.....	2
.....	1
.....	1
.....	1
.....	2
Massachusetts—Continued.	
Middlesex County—Continued.	
Sudbury (town)	1
Watertown (town)	1
Plymouth County—	
Brockton	1
Suffolk County—	
Boston	13
Chelsea	1
Worcester County—	
Gardner (town)	1
Northboro (town)	1
Worcester	2
Total	33
Oklahoma:	
Caddo County	1

ports for Week Ended Apr. 26, 1919.

Cases.	Deaths.	Place.	Cases.	Deaths.
	1	Mason City, Iowa	1	
1	1	Milwaukee, Wis	1	1
	4	Minneapolis, Minn	1	2
		Mobile, Ala	1	
		New Bedford, Mass		1
	1	New Orleans, La	1	1
		New York, N. Y	6	
	1	Oakland, Calif	1	
		Philadelphia, Pa	1	1
		Pittsburgh, Pa	1	
		Portland, Oreg		1
		Providence, R. I	1	
		St. Louis, Mo	1	
		San Antonio, Tex	2	1
		Scranton, Pa	2	
		Trenton, N. J	1	1
		Washington, D. C	1	

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croid 10, syphilis and gonorrhea 2, gonorrhea and chancroid 1.
enza: Cleveland County 12, Cumberland County 1, Gaston
ty 1.

io.—Lethargic encephalitis: Franklin County 1, Columbus 1.
les epidemic in Findlay. Scarlet fever: Lima 15, Cincinnati
Smallpox: Toledo 17, Middletown 13.

egon.—Portland reports 35 cases and 2 deaths from influenza,
County 27, and Tillamook 17.

rginia.—Smallpox: Dickinson County 1, Norfolk 1, Alexandria
ddlesex 2.

ashington.—Unusual prevalence of disease. Measles: Seattle
Bremerton 14, Tacoma 17. Smallpox in a mild form prevalent
ghout the State.

ANTHRAX.

Massachusetts Report for April, 1919.

ring April, 1919, one case of anthrax was reported in
achusetts.

New York, N. Y., Week Ended Apr. 26, 1919.

ring the week ended April 26, 1919, there were reported in
York, N. Y., one case of anthrax and one death from that
e.

CEREBROSPINAL MENINGITIS.

ases Reported in Extra-Cantonment Zones, Week Ended May 10, 1919.

	Cases.		Cases.
ordon zone, Ga.	1	Camp Travis zone, Tex.	1

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CEREBROSPINAL MENINGITIS—Continued.

State Reports for April, 1919.

Place.	New cases reported.
a:	
rus County	1
ksonville	2
lsboro County	1
eechobee County	1
nter County	1
Total	6
husetts:	
ex County—	
Beverly	1
mpshire County—	
Worthington (town)	1
ddlesex County	3
Everett	2
Hudson (town)	1
Malden	1
Newton	1
Somerville	2
Massachusetts—Continued.	
Middlesex County—Continued.	
Sudbury (town)	1
Watertown (town)	1
Plymouth County—	
Brockton	1
Suffolk County—	
Boston	13
Chelsea	1
Worcester County—	
Gardner (town)	1
Northboro (town)	1
Worcester	2
Total	33
Oklahoma:	
Caddo County	1

City Reports for Week Ended Apr. 26, 1919.

Place.	Cases.	Deaths.
re, Md		1
, Mass	1	1
Mass	4	4
N. Y	1	
Ill	2	
itf, Ohio	1	1
Mich	1	
Minn	1	1
h, N. J	1	
Mass	1	
n, Tex	1	
rg, Pa	1	
, Conn	2	
City, Mo	1	
n, Ky		1
ck, Ark	1	
les, Calif	3	
Mason City, Iowa	1	
Milwaukee, Wis	1	1
Minneapolis, Minn	1	2
Mobile, Ala	1	
New Bedford, Mass		1
New Orleans, La	1	1
New York, N. Y	6	
Oakland, Calif	1	
Philadelphia, Pa	1	1
Pittsburgh, Pa	1	
Portland, Oreg		1
Providence, R. I	1	
St. Louis, Mo	1	
San Antonio, Tex	2	1
Scranton, Pa	2	
Trenton, N. J	1	1
Washington, D. C	1	

CHANCROID.

ases Reported in Extra-Cantonment Zones, Week Ended May 10, 1919.

	Cases.
ille sanitary district, N. C	1
Camp Gordon zone, Ga	2

DIPHTHERIA.

ases Reported in Extra-Cantonment Zones, Week Ended May 10, 1919.

	Cases.
nston zone, Kans	3
rdon zone, Ga	1
kson zone, S. C	1
zone, Va	1
rritt zone, N. J	1
Camp Polk zone, N. C	1
Portsmouth and Norfolk County health district, Va	1
Camp Travis zone, Tex	3

so Diphtheria, measles, scarlet fever, and tuberculosis, page 1097.

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Calif.

LETHARGIC ENCEPHALITIS.

Cases Reported for Week Ended May 10, 1919.

	Cases.
Alabama:	
State at large (week ended May 3)	1
Illinois:	
Bloomingdale	1
Chicago (week ended May 3)	1
Ramsey	1
Springfield	1
Tunnel Hill (Johnson County)	1
Mason County (Bath Township)	1
Massachusetts:	
Everett (week ended May 3)	1
North Carolina:	
State at large	1
Ohio:	
Columbus	1
Franklin County	1
Oklahoma:	
State at large (April report)	2

Oklahoma Report for April, 1919.

During April, 1919, two cases of lethargic encephalitis were reported in Pittsburg County, Okla.

MALARIA.

State Reports for April, 1919.

Place.	New cases reported.
Florida:	
Alachua County	3
Bradford County	3
Citrus County	5
Columbia County	1
Miami	2
Duval County	2
Jacksonville	1
Pensacola	2
Gadsden County	6
Hillsboro County	1
Tampa	2
Jackson County	2
Lafayette County	5
Lake County	1
Levy County	3
Manatee County	3
Marion County	9
Orange County	3
Florida—Continued.	
Pasco County	2
Polk County	1
St. Johns County	2
St. Lucie County	2
Seminole County	1
Sumter County	1
Suwannee County	3
Taylor County	1
Total	67
Massachusetts:	
Middlesex County—	
Wayland (town)	1
Suffolk County—	
Boston	2
Total	3

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Diphtheria, measles, scarlet fever, and tuberculosis, page 1097.

PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 10, 1919.

	Case.		Case.
ton zone, Kans	1	Wilmington sanitary district, N. C	1

State Reports for April, 1919.

Place.	New cases reported.	Place.	New cases reported.
		Oklahoma—Continued.	
ville	1	Kiowa County	1
o County	2	Love County	1
unty	1	McCurtain County	1
a County	1	McIntosh County	10
County	1	Mayes County	2
County	4	Payne County	1
	10	Pottawatomie County	1
		Pushmataha County	1
ounty	1	Sequoyah County	5
unty	1	Stephens County	3
County	1	Total	29

City Reports for Week Ended Apr. 26, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Ky		1	Raleigh, N. C		1
		1	Spartanburg, S. C		1
N. Y		1	Tuscaloosa, Ala	1	
ia, Pa	1		Winston-Salem, N. C	1	

PNEUMONIA.

ases Reported in Extra-Cantonment Zones, Week Ended May 10, 1919.

	Cases.		Cases.
ordon zone, Ga	3	Wilmington sanitary district, N. C	1
id plant zone, Ga	1		

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Paso, Tex	8				Pittsburg, Kans	1			
glewood, N. J	2				Port Chester, N. Y	1			
erett, Mass	5	1			Portsmouth, Va	3	4		
l River, Mass	3	1			Poughkeepsie, N. Y	1			
hburg, Mass	1				Reno, Nev	1	2		
t Worth, Tex	3	3			Rochester, N. Y	15	7		
nd Rapids, Mich	11	1			Rome, N. Y	1			
kensack, N. J			1	1	San Antonio, Tex	1			
verhill, Mass	2				San Diego, Calif			2	1
hland Park, Mich	1				San Francisco, Calif	5	6		
yoke, Mass	2	3			Santa Cruz, Calif	1			
ependence, Mo			1	1	Saratoga Springs, N. Y	1			
ica, N. Y	1				Schenectady, N. Y	3	2		
iestown, N. Y	1				Somerville, Mass	3	3		
nstown, N. Y	1	1			Springfield, Mass	5	2		
lamazoo, Mich	2	1			Stockton, Calif	1	2		
nsas City, Kans			4		Trenton, N. J	1	1		
nsas City, Mo			11	9	Wakefield, Mass	1	1		
rny, N. J	3	1			Watertown, Mass	1			
kawanna, N. Y	5	1			Westfield, Mass	1			
minster, Mass	1	1			Wichita, Kans	1	1		
tle Rock, Ark	3	1			Winston-Salem, N. C	1			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for April, 1919.

Place.	New cases reported.
rida:	
Polk County	1
ssachusetts:	
Essex County—	
Lawrence	1
Middlesex County—	
Lowell	1
Plymouth County—	
Abington (town)	1

Place.	New cases reported.
Massachusetts—Continued.	
Suffolk County—	
Boston	1
Total	4
Oklahoma:	
Pottawatomie County	1
Stephens County	1
Total	2

New York, N. Y., Week Ended Apr. 26, 1919.

During the week ended April 26, 1919, one case of poliomyelitis s reported in New York, N. Y.

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Wilmington sanitary district, N. C..... 2
Norfolk County health dis- 1

, scarlet fever, and tuberculosis, page 1097.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended May 10, 1919.

	Cases.		Cases.
...etteville sanitary district, N. C.	3	Camp Jackson zone, S. C.	7
...p Funston zone, Kans.	1	Camp Polk zone, N. C.	4
...and Flame school zone, Ga. and Ala.	9	Portsmouth and Norfolk County health district, Va.	7
...p Gordon zone, Ga.	23		
...p A. A. Humphreys zone, Va.	1		

State Reports for April, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
...icopa County—						
...Phoenix	5					
...che County—						
...t. Johns	2					
Total	7		1		3	
...as County	5		1		1	2
...etts:						
...County—	1					
...ucester	2		2		4	
...len County—						2
...ingfield	3				3	
...County—						
...ton	6					
...tal				1		
				2		
				3		
				6		

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Adrian, Mich.	3	Long Beach, Calif.	3
Ann Harbor, Mich.	1	Los Angeles, Calif.	1
Atlanta, Ga.	27	Madison, Wis.	2
Austin, Tex.	4	Manitowoc, Wis.	1
Baltimore, Md.	2	Marinette, Wis.	2
Baton Rouge, La.	1	Marshalltown, Iowa	5
Beaumont, Tex.	1	Mason City, Iowa.	5
Bedford, Ind.	4	Milwaukee, Wis.	16
Bellingham, Wash.	1	Minneapolis, Minn.	12
Beloit, Wis.	2	Missoula, Mont.	2
Birmingham, Ala.	1	Mobile, Ala.	9
Bluefield, W. Va.	4	Montgomery, Ala.	2
Boulder, Colo.	4	Muskogee, Okla.	3
Camden, N. J.	1	Nashville, Tenn.	3
Canton, Ill.	5	Newport, Ky.	1
Cedar Rapids, Iowa.	10	New York, N. Y.	4
Chanute, Kans.	9	Norfolk, Va.	3
Chicago, Ill.	2	Oakland, Calif.	5
Cincinnati, Ohio.	4	Ogden, Utah	2
Clarksburg, W. Va.	2	Oklahoma City, Okla.	12
Cleveland, Ohio.	7	Omaha, Nebr.	31
Coffeyville, Kans.	1	Oshkosh, Wish.	12
Columbia, S. C.	1	Palestine, Tex.	2
Council Bluffs, Iowa.	8	Parsons, Kans.	2
Dallas, Tex.	28	Pekin, Ill.	8
Danville, Ill.	1	Peoria, Ill.	1
Davenport, Iowa.	10	Philadelphia, Pa.	1
Dayton, Ohio.	2	Pine Bluff, Ark.	1
Detroit, Mich.	6	Piqua, Ohio.	1
Duluth, Minn.	2	Pontiac, Mich.	1
El Paso, Tex.	1	Portland, Oreg.	36
Eureka, Calif.	1	Quincy, Ill.	1
Everett, Wash.	6	Roanoke, Va.	12
Fort Wayne, Ind.	3	St. Louis, Mo.	4
Fort Worth, Tex.	3	St. Paul, Minn.	21
Great Falls, Mont.	2	Salt Lake City, Utah	16
Greeley, Colo.	1	San Francisco, Calif.	4
Green Bay, Wis.	5	Seattle, Wash.	23
Greenville, S. C.	1	Sioux City, Iowa.	5
Hammond, Ind.	2	Sioux Falls, S. Dak.	1
High Point, N. C.	1	Spokane, Wash.	1
Hoboken, N. J.	1	Stillwater, Minn.	1
Hoquiam, Wash.	1	Tacoma, Wash.	5
Hutchinson, Kans.	1	Terre Haute, Ind.	4
Independence, Mo.	8	Toledo, Ohio.	7
Indianapolis, Ind.	5	Topeka, Kans.	3
Kalamazoo, Mich.	2	Tulsa, Okla.	8
Kansas City, Kans.	4	Washington, D. C.	9
Kansas City, Mo.	7	Wichita, Kans.	7
Knoxville, Tenn.	3	Winston-Salem, N. C.	20
Kokomo, Ind.	4	Yakima, Wash.	1
La Fayette, Ind.	2	Youngstown, Ohio.	15
Leavenworth, Kans.	3		

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Place.	Cases.
Jackson zone, Ga. and Ala.	1
Jackson zone, S. C.	1
Lee zone, Va.	5
	1

Place.	Cases.
Camp Polk zone, N. C.	5
Camp Travis zone, Tex.	2
Camp Upton zone, N. Y.	2
Wilmington sanitary district, N. C.	2

e also Diphtheria, measles, scarlet fever, and tuberculosis, page 1097.

Cases Reported in Extra-Cantonment Zones, Week Ended May 10, 1919.

TYPHOID FEVER.

Place.	Cases.
ordon zone, Ga.	1
id plant zone, Ga.	2

Place.	Cases.
Camp Upton zone, N. Y.	1
Wilmington sanitary district, N. C.	1

State Reports for March and April, 1919.

Place.	New cases reported.
April):	
opa County—	
oenix	2
pril):	
a County	1
d County	3
d County	2
unty	3
ni	5
County	3
ounty	1
onville	4
a County	1
County	1
pa	17
ounty	1
County	2
y	1
nty	1
ounty	1
unty—	
est	5
nty	3

Place.	New cases reported.
Florida (April)—Continued.	
Palm Beach County	2
Pinellas County	1
Polk County	3
Putnam County	4
St. Johns County	12
Volusia County	21
Total	98
Massachusetts (April):	
Berkshire County—	
Adams (town)	2
Pittsfield	1
Bristol County—	
Fall River	3
New Bedford	1
Essex County—	
Haverhill	2
Lawrence	6
Lynn	1
Methuen	1
Newburyport	2
Franklin County—	
Northfield (town)	1

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Worcester County—	
Milford (town)	2
Worcester	1
Total	45
Oklahoma (April):	
Atoka County	1
Canadian County	2
Creek County	5
Delaware County	2
Kiowa County	1
Le Flore County	11
Lincoln County	1

Addison County	1
Franklin County	1
Lamoille County	1
Total	3
Vermont (April):	
Bennington County	1
Essex County	1
Total	2

City Reports for Week Ended Apr. 26, 1919.

Place.	Cases.	Deaths.
Baltimore, Md.	4	
Baton Rouge, La.		1
Beaver Falls, Pa.	1	
Beloit, Wis.	1	
Birmingham, Ala.	2	
Boston, Mass.	1	
Buffalo, N. Y.		1
Camden, N. J.	1	
Chester, Pa.	2	
Chicago, Ill.	4	
Cincinnati, Ohio.	1	
Covington, Ky.	4	1
Dallas, Tex.	1	
Detroit, Mich.	1	
East Chicago, Ind.		3
Elizabeth, N. J.	1	
Galveston, Tex.	2	
Grand Rapids, Mich.	3	2
Hammond, Ind.		1
Hibbing, Minn.	2	
Houston, Tex.	1	
Kalamazoo, Mich.	1	
Los Angeles, Calif.	3	
Louisville, Ky.	1	
Macon, Ga.	1	
Malden, Mass.	1	
Memphis, Tenn.	9	
Milwaukee, Wis.	1	
Missoula, Mont.		1
Mobile, Ala.	2	
Montclair, N. J.	1	
Newburyport, Mass.	2	
New Orleans, La.	1	
New York, N. Y.	4	
Niagara Falls, N. Y.	1	
Philadelphia, Pa.	8	
Pittsburgh, Pa.	1	
Providence, R. I.	1	
Racine, Wis.	2	
Reading, Pa.	1	
Richmond, Va.	1	
Rocky Mount, N. C.	1	
Sacramento, Calif.		1
St. Louis, Mo.	4	1
San Antonio, Tex.	1	
Seattle, Wash.	1	
Somerville, Mass.	1	
Springfield, Ill.	2	
Stockton, Calif.	2	
Superior, Wis.	2	
Toledo, Ohio.	1	
Trenton, N. J.		1
Tulsa, Okla.	2	
Walla Walla, Wash.	1	
Washington, D. C.	4	
Wilmington, Del.	1	
Wilmington, N. C.	8	1
Winston-Salem, N. C.	1	

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...ad	24,280	5								1
...Mich	15,041	8					1		1	1
...nn	16,954	4							1	
...is	18,005	2								
...lass	13,073	4								
..., N. J	14,629	6			3					
...Ohio	22,008	7			1					1
	196,144	44			8		3			6
..., N. J	59,515	12			1		2		13	
...ass	19,776	4	2							
	35,612	9					2			2
...Calif	17,543						1			
...ld	594,637	233	35	3	50		200	2	58	36
	26,958						1			
..., La	17,544	10			2					
..., Mich	30,159		3		17		2			
...J	72,204		4		1		3		5	
...f	11,674	3								
...br	10,437	1								
...Tex	28,851	5								1
..., Pa	13,749						1			
...l	10,613	2								
...o	14,575	7	1						1	
...J	12,797		2				1			
	18,547	4			5		6			
...oor, Mich	11,099	2			2		1		1	
...lif	60,427	11			1				1	
	13,892	5								
...ss	22,128	6							1	1
...le	17,760	4								
...nt	15,123		1				3			
...n, N. Y	54,864	16			1		2			
..., Ala	189,716	42			8				11	6
...N. J	19,013				1				2	
...Va	16,123						2			
	35,951	8			2		3			
...s	767,813	246	27	3	17		40	2	42	29
...a	22,060		3		1		2			
	10,472	1			4					1
...Conn	124,724	34	4	3	9		3		2	3
...t	16,318	4								
...ass	69,152	14			1		10		5	1
...ass	33,526	8			6		2			
...Ga	10,984	3			4					1
...f	475,781	144	43	2	66		15		29	17
...Iowa	25,144	6					2			
	28,677						3			
	44,057						3			
...h	10,158	1								1
	15,995	1	2							
...Mass	114,293	27	2		10		5		7	5

[1] Population Apr. 15, 1910.

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mbia, S.C.	35,165									
mbus, Ohio	220,135	74	1		2		2		5	
cord, N.H.	22,858	11								1
llsville, Pa	15,876				7		1		1	
us Christi, Tex	10,789		1							
ncil Bluffs, Iowa	31,838	9	5							
ington, Ky	59,623	13	2				1		2	3
berland, Md	26,686	1	1		8		5		2	
as, Tex	129,738	26	2		1		1		5	
bury, Conn	22,931	4								
vers, Mass	10,037	2							2	2
ville, Ill	32,969	4			1					
ville, Va	20,133	5								
enport, Iowa	49,618		2				1			
ton, Ohio	128,939	30	2		2		2		4	
atur, Ill	41,483	6	1						3	2
ham, Mass	10,618		2				1			
ver, Colo	268,439	68	12	1	3		6			23
Moines, Iowa	104,052		1		4		21		7	
roit, Mich	619,648	214	67	5	78	1	71	1	36	21
er, N.H	13,276	5								
Bois, Pa	14,994		1		1		6			
buque, Iowa	40,096		1							1
uth, Minn	97,077	29	3	1	20	2		1	6	1
ham, N.C	26,160	2			14				1	
Chicago, Ind	30,286	10								
Cleveland, Ohio	13,864				1		1			
ton, Pa	30,854				6				2	
Orange, N.J	43,761	10			1		1		4	2
Providence, R.I	18,485						2			
Claire, Wis	18,887				25				1	
abeth, N.J	88,330		4		2		12		1	3
ira, N.Y	38,272	6	1		1				3	
aso, Tex	69,149	44					11			7
lewood, N.J	12,603	1								
, Pa	76,592		1		5					
eka, Calif	15,142	2								
nston, Ill	29,304	9	1		144					
nsville, Ind	76,984	16	4		1		3		1	2
rett, Mass	40,160	9	1		1		3			1
mount, W.Va	16,111				2					
River, Mass	129,828	28	4	2	52		2		5	6
o, N.Dak	17,872	8	1		12		4			
ell, Pa	10,190		2							
llay, Ohio	14,858	4			4					
hburg, Mass	48,119	7					1			
l du Lac, Wis	21,486	8					6			
Scott, Kans	10,564	4								
Wayne, Ind	78,014	17	1		15				2	3
Worth, Tex	109,597	22	1	1	5		5		2	2
oria, Ohio	10,959	1								

[1] Population Apr. 15, 1910.

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N.C.	20,171	7							1	
rg, Pa.	15,881				7					2
le, S.C.	18,574				2					
ch, Conn.	19,594		1				5		2	
ack, N.J.	17,412	7	2		1		1		1	1
nd, Ind.	27,016	12								1
, Mich.	12,578	3								
rg, Pa.	73,276		5		133		2			
, Conn.	112,851	39	2		6		3		5	3
l, Mass.	49,180	16	4		1				2	2
, Pa.	28,981				1		1			
Park, Mich.	33,859	8	12		2		3			
nt, N.C.	13,439	2			3					
N.J.	78,324	16	5		2				6	3
Mich.	12,459	2								
Mass.	66,503	20	1				4		2	3
d, Pa.	23,071				1				1	
Tex.	116,878	26	1						3	1
N. Y.	12,898	5								
on, Kans.	21,461				2				1	
ence, Mo.	11,964	10			26				1	
lis, Ind.	283,622	77	5	2	51		17		16	6
Ohio	14,079	3								1
, Mich.	15,095	3			2					1
Y.	16,017	10			2		2		2	1
n, N.Y.	37,431	14			1		2		3	
y, N.J.	312,557		30		12		7		13	
n, N.Y.	10,678	4							1	1
n, Pa.	70,473		1		1				1	
o, Mich.	33,400	3							2	
Ill.	50,408		3	1	10		6		3	1
ty, Kans.	14,270				2					
ty, Mo.	102,096		3		9		2		4	
J.	305,816	93	6	2	53	1	7	1	1	8
H	24,325	5	2	1			2		1	1
Wis.	10,725	5								
Tenn.	32,833	7	2		44		3		2	
Ind.	59,112				15		2		1	1
na, N.Y.	21,929	20	1				3			
Wis.	16,219	5	4		12					
e, Ind.	31,833	13	1							
Ohio	21,481	4			1		3			
Ohio.	23,813	11	1						3	3
Pa.	16,086	5			1					
Kans.	51,437				12		1		1	
th, Kans.	13,477	3								
Pa.	[1] 19,363		7	2						
r, Mass.	20,947				23				1	
Ky.	21,365	7			13					
	41,997	12			14					1
ebr.	37,145	12	3		18		17		1	2
s, Ark.	46,957	11	3				3			
N. Y.	58,716	3					6		4	
, Ind.	20,028	7			66				3	
h, Calif.	21,338	12						2		
ch, N. J.	29,163	26							1	
lo.	15,733	3					1		2	
	38,266	5			2				1	

[1] Population Apr. 15, 1910.

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Manchester, N. H.	19,[illegible]	25	1		2					
Manitowoc, Wis.	13,931	1								
Mankato, Minn	[1] 10,365	4	1					1		
Marinette, Wis.	[1] 14,610	1					2			
Marion, Ind.	19,923	10	1				5	1	1	
Marlboro, Mass.	15,285	4							1	
Marquette, Mich.	12,555	9			3					
Martinsburg, W. Va.	12,984				8		1			
Martins Ferry, Ohio	10,135	1							1	1
Mason City, Iowa	14,928	8	1							
Meadville, Pa.	13,968				1				2	
Medford, Mass.	20,681	7	2							1
Melrose, Mass.	17,724	2							1	1
Memphis, Tenn.	151,877	41	4		69		4		6	7
Meriden, Conn.	29,431		1				4			1
Methuen, Mass.	14,320	4	1				1		1	
Middletown, N. Y.	15,890				1				3	
Middletown, Ohio	16,384	7								4
Milford, Mass.	14,280	2								
Milwaukee, Wis.	445,008	129	15	3	6		21		15	9
Minneapolis, Minn.	373,448	102	10	2	28		41	1	19	9
Missoula, Mont.	19,075	4			2					
Mobile, Ala.	59,201	15			2	1				3
Moline, Ill.	27,976	1	1				2			
Monessen, Pa.	23,070						1		1	
Montclair, N. J.	27,087				2		3		1	
Montgomery, Ala.	44,039	7			1		2		1	3
Morgantown, W. Va.	14,444	3							1	
Morristown, N. J.	13,410				1					
Mount Carmel, Pa.	20,709		1		6		1		3	
Mount Vernon, N. Y.	37,991	7								
Muscatine, Iowa	17,713				1					
Nanticoke, Pa.	23,811		1		1		2			
Nashua, N. H.	27,541	10	1				1			1
Nashville, Tenn.	118,136	42			26				5	5
Natick, Mass.	10,140	6							1	
Newark, N. J.	418,789	107	38	2	4		23		37	15
New Bedford, Mass.	121,622	39			14		8	1	4	3
New Britain, Conn.	5[illegible],385	13			17					
New Brunswick, N. J.	25,855						3			
Newburgh, N. Y.	29,893	8			1				3	1
Newburyport, Mass.	15,291	3			1				1	
New Castle, Pa.	41,915						2		1	
New Haven, Conn.	152,275	36	13	1	9		4		6	3
New London, Conn.	21,199	17	2		1				1	
New Orleans, La.	377,010		9		19		4	1	16	11
Newport, Ky.	32,133	6					1			
Newport, R. I.	30,585	13					6			7
Newton, Mass.	44,345	13	3		1		1		1	
New York, N. Y.	5,737,492	1,489	327	31	160	3	122	6	364	139
Niagara Falls, N. Y.	38,466	14			1				3	2
Norfolk, Va.	91,148		1		2					7
Norristown, Pa.	31,969				83		2			
North Adams, Mass.	[1] 22,019	11							1	1
Northampton, Mass.	20,006	7			2		1		1	
North Attleboro, Mass.	11,248	3								
North Braddock, Pa.	15,684		2		1				4	
North Tonowanda, N. Y.	14,060	5			21					1
Norwalk, Conn.	27,332						1		1	2
Norwich, Conn.	21,923	1			1		1		3	1
Norwood, Ohio	23,269	1	1				1			

[1] Population Apr. 15, 1910.

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, N. J.	74,478	15	1		2		1		1	2
n, N. J.	140,512		8		2		2		15	
ll, N. Y.	19,034	2								
Ill.	72,184	21	2				1			
mboy, N. J.	42,646	7	3						1	
lphia, Pa.	1,735,514	527	108	13	140	1	78	2	114	78
burg, N. J.	15,879	5			1				2	2
uff, Ark.	17,777		1						1	
Ohio	14,275	1							1	
rgh, Pa.	586,196		15		14		5		28	
g, Kans.	18,340	3								
d, Mass.	39,678	21					2		6	1
, Pa.	18,975						1			
d, N. J.	24,330	1	2							
rg, N. Y.	13,111	6	1						1	1
th, Pa.	19,439				1				1	
, Mich.	18,006	12	4				2		2	2
ester, N. Y.	16,727						3			
d, Me.	64,720	15	3		1		8			2
d, Oreg.	308,399	61	2				8		7	6
outh, N. H.	11,730								1	
outh, Va.	40,693	13						1	6	1
le, Pa.	22,717		1		9					
eepsie, N. Y.	30,786	9	2				4		1	
nce, R. I.	259,895	61	6	1	1		8	1		12
Colo.	56,084		1		1					
Ill.	36,832	9			1		2			
Mass.	39,022	9	1				1		2	
Wis.	47,465	16	1						1	4
, N. J.	10,361	7					1			1
, N. C.	20,274	7	1		1				1	1
, Pa.	111,607		4		32		2			
ls, Calif.	14,573	1							1	
lev.	15,514	4								
nd, Va.	158,702	49	1		25		1		6	7
le, Calif.	20,496	5					2			1
e, Va.	46,282	11			50		8			2
er, N. Y.	264,714	84	4	1	3	3	21		10	6
d, Ill.	56,739	12			46		4			
Mount, N. C.	12,673	5								1
N. Y.	24,259		3						2	
d, Vt.	15,038	6								
nto, Calif.	68,984	28					2		7	8
, Mich.	56,469	19	1				2		1	5
d, Minn.	12,013		1		25		2			
is, Mo.	768,630	192	29	2	69	1	29	1	25	13
l, Minn.	252,465	64	21	2	65	2	8		38	5
Mass.	49,346	14	3				5		1	2
Oreg.	21,274	10								1
ke City, Utah	121,623	29	5		1		3		2	1
gelo, Tex.	[1] 10,321	4								1
tonio, Tex.	128,215	12	2		2				14	11
go, Calif.	56,412	22	3	1			2		4	3
ky, Ohio	20,226	8	3		2				3	
, Me.	11,217	4								
ncisco, Calif.	471,023	144	5		1		7		37	
e, Calif.	39,810						1			
Barbara, Calif.	15,360	5								
Cruz, Calif.	15,150	4								

[1] Population Apr. 15, 1910.

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended Apr. 26, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Saratoga Springs, N. Y.	13,839	3							2	1
Saugus, Mass.	10,210	6	3						1	1
Sault Ste. Marie, Mich.	14,120	4							1	1
Schenectady, N. Y.	103,774	18	1				3		5	1
Scranton, Pa.	149,541		1		1		2		3	
Seattle, Wash.	366,445		4		39		19			
Shamokin, Pa.	21,274		3				1			
Sioux Falls, S. Dak.	16,887	1			2					
Somerville, Mass.	88,618	20	5		3		7		2	1
South Bend, Ind.	70,967	17	1		13					1
Southbridge, Mass.	14,465	1	1							
Spartanburg, S. C.	21,965	6	1						1	1
Spokane, Wash.	157,656				5		7			
Springfield, Ill.	62,623	19	1						1	2
Springfield, Mass.	108,668	32	3	1	1		4		4	2
Springfield, Mo.	41,169	16								2
Springfield, Ohio.	52,296	18			28		1		9	6
Steelton, Pa.	15,759		1		5				1	
Steubenville, Ohio.	28,269	12								
Stockton, Calif.	36,209	18							2	1
Streator, Ill.	14,313	4								
Sunbury, Pa.	16,661		1		2					
Superior, Wis.	47,167	8								
Syracuse, N. Y.	158,589	34	3		1		5		3	2
Tacoma, Wash.	117,446		1		3		3			
Taunton, Mass.	36,610	15	1		24		1		3	1
Terre Haute, Ind.	67,361	19	1		2				3	2
Tiffin, Ohio.	12,963								1	
Toledo, Ohio.	202,010	70			20		9	1	13	9
Topeka, Kans.	49,538	10	1		2				1	1
Trenton, N. J.	113,974	35	3		39		3		9	7
Troy, N. Y.	78,094	32	24				3		3	3
Tulsa, Okla.	32,507		1							
Tuscaloosa, Ala.	10,824	5	1		1				4	
Uniontown, Pa.	21,000		1							
Utica, N. Y.	89,272	30	2	1	22		3		5	
Vallejo, Calif.	13,803	8								1
Vancouver, Wash.	13,805				1				1	
Virginia, Minn.	15,954		1							
Wakefield, Mass.	12,947	3					2			1
Walla Walla, Wash.	26,067				1		2			
Waltham, Mass.	31,011	18	1				2		1	1
Washington, D. C.	309,282		22	5	25		19		24	11
Washington, Pa.	22,076						2			
Waterbury, Conn.	80,201	4	4		21	1	4	1	6	3
Watertown, Mass.	15,188	2								
Watertown, N. Y.	30,404	14	3		1		1			
Wausau, Wis.	19,666	1			1					
West Chester, Pa.	13,403		1		1		2			
Westfield, Mass.	18,769	3					4		2	1
West Hoboken, N. J.	44,896	3			1				2	1
West New York, N. J.	19,613	3	1		1		1			
West Orange, N. J.	13,964	3			1		6		1	
Wheeling, W. Va.	43,657	9			1		1			
White Plains, N. Y.	23,331	5								1
Wichita, Kans.	73,597	23			3					2
Wilkes-Barre, Pa.	78,334		1		99		2		4	
Wilkinsburg, Pa.	23,899				1		1			
Williamsport, Pa.	34,123				6		1			
Wilmington, Del.	95,369	32					4			6
Wilmington, N. C.	30,400	8							10	1
Winchester, Mass.	10,812	2								
Winona, Minn.	19,583	9								
Winston-Salem, N. C.	33,136	6			35		1		2	1
Winthrop, Mass.	13,105		2		4					
Woburn, Mass.	16,076	6								1
Worcester, Mass.	168,108	56	5	1	60		1	1	6	6
Yonkers, N. Y.	103,066	29	6		12		4			5
York, Pa.	52,770		2				5		2	
Youngstown, Ohio.	112,282	49	6		72	1	4		3	2
Zanesville, Ohio.	31,520	19			1					

[1] Population Apr. 15, 1910.

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FOREIGN.

CUBA.

Communicable Diseases—Habana.

ommunicable diseases have been notified at Habana as follows:

Disease.	Apr. 1–10, 1919.		Remaining under treatment Apr. 10, 1919.	Disease.	Apr. 1–10, 1919.		Remaining under treatment Apr. 10, 1919.
	New cases.	Deaths			New cases.	Deaths	
io-pneumonia	.....	.....	[1] 4	Malaria	13	.....	[2] 21
iza	3	3	[1] 8	Paratyphoid fever	3	.....	3
y	.....	.....	17	Typhoid fever	17	3	[2] 53

[1] Excluding those remaining in hospital.
[2] From the interior 19.
[3] From the interior 22.

FINLAND.

Smallpox—Typhus Fever—January-February, 1919.

ıring the month of January, 1919, 279 cases of smallpox and 24 of typhus fever were reported in Finland. The cases of smallwere distributed throughout the eight Provinces of Finland, the est prevalence, viz, 126 cases, being reported from the Province borg, on the Gulf of Finland. The cases of typhus occurred in 'rovince of Abo Och Björneborg, and were reported from one ncial district. During the month of February, 1919, 234 cases ıallpox were reported. The cases occurred in six Provinces, the greatest prevalence, viz, 118 cases, in the Province of g. There were reported during the month of February 29 of typhus fever, of which 19 were notified in provincial dis- of the Province of Abo Och Björneborg, and 10 cases in the nce of Nyland.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended May 16, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
e Islands:				
a	Mar. 22–29	4	4	
nces		.....	.....	Mar. 23–29, 1919: Cases, 81; deaths, 56.
atangas	Mar. 23–29	8	11	
ohol	do	27	14	
ollo	do	5	3	
aguna	do	10	8	
isamis	do	10	3	
ampanga	do	18	15	
angasinan	do	3	2	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended May 16, 1919—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Hongkong	Feb. 23-Mar. 15	13	11	
Ecuador:				
Guayaquil	Mar. 16-31	4	2	

SMALLPOX.

Austria				Dec. 1, 1918-Jan. 11, 1919: Cases, 65. Jan. 12-Feb. 4, 1919: Cases, 57.
Vienna	Dec. 1-Jan. 11	6		
Bohemia				Feb. 1919: Reported prevalent. March, 1919: Cases, 8.
Gablonz	Mar. 1-31	20		
Canada:				
Nova Scotia—				
Halifax	Apr. 20-26	25		
Quebec—				
Montreal	do	1		
Quebec	do	4		
China:				
Amoy	Mar. 11-24		3	
Foochow	Mar. 9-22			Present.
Hongkong	Feb. 23-Mar. 29	3	2	
Egypt:				
Alexandria	Mar. 26-Apr. 1	4	3	
Finland:				
Provinces				Jan. 1-31, 1919: Cases, 233.
Abo Och Björneborg	Jan. 1-31	47		
Kuopio	do	47		
Nyland	do	2		
St. Michael	do	51		
Tavastehus	do	4		
Uleaborg	do	1		
Vasa	do	1		
Viborg	do	126		
Provinces				Feb. 1-28, 1919: Cases, 324.
Abo Och Björneborg	Feb. 1-28	28		
Kupio	do	54		
Nyland	do	15		
St. Michael	do	20		
Tavastehus	do	4		
Viborg	do	118		
Germany				Dec. 8, 1918-Jan. 11, 1919: Cases, 177. Additional cases reported later, 54, for week ended Jan. 11.
Aix-la-Chapelle (district)	Dec. 8-Jan. 11	17		
Cassel	do	10		
Danzig	do	3		
Doristhal	do	8		District of Gumbinnen.
Dresden	do	71		26 additional cases reported later at Dresden.
Halle	do	5		
Hanover	do	7		Among interned Russians.
Königsberg	do	15		
Kottowitz	do	5		
Meyrode	do	6		
Riesa	do	4		District of Dresden.
Germany				Jan. 12-Feb. 15, 1919: Cases, 62.
Dresden	Jan. 12-Feb. 15	176		
Italy:				
Andria	Mar. 10-16	1		Province of Bari.
Barletta	Mar. 3-9	2		Do.
Lecce Province	Feb. 17-23	2		
Naples	Mar. 10-16	2		
Japan:				
Nagasaki	Mar. 31-Apr. 6	3		
Manchuria:				
Dairen	Mar. 25-31	1		
Newfoundland:				
Outports	Apr. 19-25	21		In 8 localities.
Philippine Islands:				
Manila	Mar. 23-29	3	3	3 varioloid.

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OLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended May 16, 1919—Continued.

TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
s				Dec. 1, 1918–Jan. 11, 1919: Cases, 128. Jan. 12–Feb. 8, 1919: Cases, 157.
enna	Dec. 1–Jan. 11	110		Occurring almost exclusively in repatriated soldiers and their contacts.
	Jan. 12–Feb. 8	119		
:				
exandria	Mar. 26–Apr. 1	66	19	
d:				
ovinces—				
Abo Och Björneborg	Jan. 1–31	24		
Do	Feb. 1–28	19		
Nyland	do	10		
ry				Nov. 4–26, 1918: Cases, 16. Nov. 27, 1918–Jan. 12, 1919: Cases, 210.
dapest	Nov. 4–26	14		
Do	Nov. 27–Jan. 12	159		
rnau	Nov. 4–26	1		
atmarnemeti	do	1		Present in county of Bihar.

YELLOW FEVER.

or:				
vaquil	Mar. 16–31	1	1	
	do	4	4	

Reports Received from Dec. 28, 1918, to May 9, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
:				
ombo	Nov. 17–30	4	5	
ay:				
lin	To Oct. 5	17	11	
men	Oct. 13–19	1		On a barge.
rienwerder				1 case in October, 1918, on a barge in canal.
nbay	Aug. 18–Dec. 28	1,351	1,031	
Do	Dec. 29–Mar. 8	9,681	8,503	
cutta	Sept. 20–Dec. 21		241	Report for Nov. 23, 1918, missing.
Do	Dec. 29–Mar. 8		869	
aohl	Jan. 26–Mar. 22	3	3	
iras	Oct. 5–Dec. 28	264	164	Oct. 27–Nov. 2, 1918: Cases, 9; deaths, 4.
Do	Jan. 5–Mar. 8	426	296	
goon	Oct. 5–Dec. 21	35	35	
Do	Dec. 29–Feb. 22	15	11	
ina				July 1–Oct. 31, 1918: Cases, 753; deaths, 472.
am	July 1–Aug. 31	37	30	
bodia	July 1–Oct. 31	324	171	
hin China	do	436	337	
Saigon	Oct. 7–Dec. 22	75	45	
Do	Dec. 3–Mar. 9	328	195	
ang-Chow-Wan	July 1–31	50	34	
kin	July 1–Oct. 31	6		
t Java				Oct. 7–Dec. 31, 1918: Cases, 381; deaths, 323. Jan. 1–28, 1919: Cases, 291; deaths, 176.
Surabaya district	Oct. 7–Dec. 31	655	423	
Do	Jan. 1–28	133	84	
-Java				Sept. 25–Dec. 13, 1919: Cases, 3,282; deaths, 2,014. Jan. 24–Feb. 20, 1919: Cases, 1,183; deaths, 928.
Samarang	Sept. 26–Oct. 16	120	111	
st Java				Oct. 3–Dec. 11, 1918: Cases, 412; deaths, 228. Dec. 27, 1918–Jan. 23, 1919: Cases, 10; deaths, 3.
Batavia	Oct. 3–Dec. 11	291	148	
Do	Dec. 27–Jan. 23	8	2	
Cheribon	Jan. 3–9	1		
amia				
dad	Oct. 11–18	8		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 9, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands:				
Manila	Sept. 22-Dec. 28	209	135	
Do	Dec. 29-Mar. 21	21	9	
Provinces				Nov. 2-Dec. 28, 1918: Cases, 1,[illegible] deaths, 1,515. Dec. 29, 1918-Mar. 21, 1919: Cases, 1,[illegible] deaths, 881.
Albay	Dec. 15-21	1	1	
Ambos Camarines	Feb. 15-21	10	2	
Bataan	Nov. 17-Dec. 28	38	32	
Batangas	Nov. 2-Dec. 28	254	230	
Do	Dec. 29-Mar. 21	63	44	
Bohol	Nov. 2-Dec. 28	29	24	
Do	Dec. 29-Mar. 14	61	51	
Bulacan	Oct. 12-Dec. 28	51	8	
Do	Dec. 29-Feb. 21	42	26	
Capiz	Dec. 22-28	7	5	
Do	Jan. 5-25	28	14	
Cavite	Oct. 27-Dec. 21	207	115	
Do	Dec. 29-Jan. 25	17	16	
Cebu	Nov. 10-Dec. 21	50	27	
Do	Jan. 12-18	13	12	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 15	56	28	
Iloilo	Oct. 27-Dec. 21	112	78	
Do	Jan. 5-Mar. 21	181	115	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Mar. 21	132	91	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 21-30	7	14	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	78	48	
Do	Jan. 5-Mar. 21	184	85	
Nueva Ecija	Jan. 12-25	9	6	
Occidental Negros	Feb. 2-Mar. 21	8	5	
Oriental Negros	Nov. 2-Dec. 7	32	18	
Do	Jan. 5-Feb. 8	35	22	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Mar 21	33	23	
Pangasinan	Nov. 2-Dec. 28	930	652	
Do	Dec. 29-Mar. 21	164	127	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 21-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-Feb. 8	44	26	
Tayabas	Nov. 2-Dec. 28	64	31	
Do	Nov. 10-Dec. 28	54	25	
Do	Dec. 29-Feb. 15	69	62	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-Feb. 8	25	21	
Poland:				
Plonsk district	Oct. 2-Nov. 27	5		
Warsaw	Sept. 29-Oct. 26	5	1	
Russia:				
Petrograd	To July 16	3,398	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 1-Aug. 21, 1918: Cases, [illegible], deaths, 753. In municipal hospitals, Oct. 1, 1918: Cases, 23
Ukrania—				
Ekaterinasiav	Sept. 1-20	7	6	
Odessa	....do	25		Sept. 1-20, 1918: 11 cases on s. s. Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
Do	Feb. 9-Mar. 15	12	9	
China:				
Amoy	Nov. 24-Dec. 8			Present.
Chungking	Dec. 1-7			Do.
Hing-Ning district	Mar. 15			Do.
Hongkong	Oct. 1-Dec. 28	4	4	
Do	Jan. 1-31	5	4	

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)LERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 9, 1919—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
lor:				
uran	Feb. 16–Mar. 15	2	1	
uayaquil	July 1–Dec. 31	20	7	
Do	Jan. 1–Mar. 15	50	14	
ura	Dec. 16–31	1	1	
				Jan. 1–Nov. 21, 1918: Cases, 357; deaths, 153. Jan. 1–Mar. 20, 1919: Cases, 87; deaths, 66.
ties—				
Alexandria	Mar. 23	1	1	
Suez	Jan. 31–Mar. 26	32	18	
ovinces—				
Assiout	Feb. 24–Mar. 23	11	8	1 septicemic.
Girgeh	Feb. 22–Mar. 22	7	5	2 pneumonic.
Minieh	Feb. 21–27	2	2	1 pneumonic.
				Sept. 29–Dec. 28, 1918: Cases, 24,279; deaths, 18,369. Dec. 29, 1918–Mar. 1, 1919: Cases, 25,506; deaths, 19,401.
mbay	Aug. 18–Dec. 28	41	29	
Do	Jan. 12–Mar. 8	6	6	
lcutta	Dec. 22–28		1	
Do	Jan. 12–Mar. 8		43	
rachi	Oct. 19–Dec. 28	17	17	
Do	Dec. 29–Mar. 22	18	16	
dras	Dec. 8–28	26	17	
Do	Dec. 29–Mar. 8	131	61	
dras Presidency	Oct. 13–Dec. 28	1,152	774	Oct. 27–Nov. 2, 1918: Cases, 142; deaths, 38.
Do	Dec. 29–Mar. 8	2,562	1,726	
ngoon	Oct. 5–Dec. 21	84	81	
Do	Dec. 29–Feb. 22	107	100	
hina				July 1–Oct. 31, 1918: Cases, 161; deaths, 145.
am	July 1–Oct. 31	42	36	
mbodia	do	72	72	
hin-China	do	66	35	
Saigon	Oct. 7–Nov. 24	5	1	
Do	Jan. 13–Mar. 9	10	8	
ang-Chow-Wan	July 1–31	1	1	
t Java				Oct. 7–Nov. 18, 1918: Cases, 109; deaths, 109. Jan. 1–14, 1919: Cases, 69; deaths, 69.
Surabaya (district)	Oct. 7–Dec. 31	92	92	
Do	Jan. 1–14	34	34	
-Java				Sept. 25–Oct. 16, 1918: Cases, 14; deaths, 14. Jan. 30–Feb. 11, 1919: Cases, 110; deaths, 110.
Samarang	Sept. 25–Oct. 16	6	6	
tamia:				
dad	Nov. 16–29	5	2	
Do	Feb. 22–28	6	4	
gkok	Sept. 21–Oct. 12	6	5	
Do	Jan. 19–Feb. 22	7	6	
la:				
cas	Dec. 30	1		
el:				
Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.

SMALLPOX.

rs	Oct. 1–Dec. 31	2	1	
le Janeiro	Dec. 1–28	46	19	Oct. 6–12, 1918: Cases, 15; deaths, 10.
Do	Dec. 30–Jan. 25	25	11	
Paulo	Mar. 3–9		1	
East Africa:				
basa	Sept. 1–Nov. 30	6	1	
Brunswick—				
ampbellton	Dec. 22–28	1		
Do	Jan. 5–18	2		
t. John	Nov. 8–14	3		
Do	Jan. 26–Feb. 22	6		
a Scotia—				
Bear River	Dec. 29–Jan. 4			Present.
Bigbee	Jan. 10			Do.
Halifax	Dec. 7–28	10		
Do	Jan. 5–Apr. 19	196		
Middleton	Dec. 29–Jan. 4			Do.
ydney	Jan. 5–Mar. 8	4		
Do	Mar. 23–Apr. 5	8		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 9, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-Apr. 12	13		
Toronto	Feb. 2-15	2		
Do	Mar. 16-22	1		
Prince Edward Island—				
Charlotte Town	Feb. 27-Apr. 16	2		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-Mar. 8	20		
Paspebiac	do	8		
Quebec	Dec. 15-21	1		
Do	Dec. 29-Mar. 15	14		
Ceylon:				
Colombo	Jan. 12-Mar. 15	3		
China:				
Amoy	Oct. 13-Dec. 28			Present.
Do	Jan. 5-Mar. 10			Do.
Antung	Feb. 10-16	1		
Do	Feb. 24-Mar. 2	1		
Canton	Nov. 17-23			Do.
Do	Feb. 9-15			Do.
Changsha	Mar. 16-23	3		
Chungking	Nov. 10-Dec. 28			Do.
Do	Jan. 5-Mar. 27			Do.
Foochow	Nov. 24-Dec. 28			Do.
Do	Dec. 29-Feb. 8			Do.
Honkong	Dec. 15-21	1	1	
Do	Feb. 2-8	1		
Do	Feb. 16-22	4		
Nanking	Dec. 1-28			Do.
Do	Dec. 29-Mar. 27			Do.
Shanghai	Jan. 20-26	1		
Tsingtau	Mar. 3-9	1		
Chosen (Korea):				
Chemulpo	Nov. 1-Dec. 31	15	4	
Do	Jan. 1-31	6	1	
Colombia:				
Barranquilla	Apr. 6-12		1	
Denmark:				
Copenhagen	Nov. 9-Dec. 28	12		
Do	Dec. 29-Jan. 19	15		
Egypt:				
Alexandria	Dec. 17-23	1	1	
Do	Jan. 22-Mar. 25	10	3	
France:				
Bordeaux	Feb. 8-13		1	
Brest	Feb. 2-8	1		
Paris	Mar. 2-27	6	2	
Germany				Nov. 24-Dec. 7, 1918. Cases, 34.
Dresden	Nov. 24-Dec. 7	18		
Halle	do	4		
Friedland	do	1		
Königsberg	do	8		In persons evacuated from the Ukraine.
Schkeuditz	do	1		
Tilsit	do	1		
Torgau	do	1		
Great Britain:				
Liverpool	Jan. 26-Mar. 15	7		Of these, 2 from vessels.
London	Mar. 9-15	5	1	
Greece:				
Saloniki	Feb. 2-15		3	
India:				
Bombay	Aug. 18-Dec. 28	35	8	
Do	Dec. 29-May 8	269	104	
Calcutta	Sept. 29-Dec. 28		17	Report for week ended Nov. 23, 1918, missing.
Do	Dec. 29-Mar. 8		170	
Karachi	Sept. 29-Dec. 28	13	4	
Do	Dec. 29-Mar. 22	107	41	
Madras	Oct. 5-Dec. 28	63	40	
Do	Dec. 29-Mar. 8	148	70	
Rangoon	Oct. 20-Dec. 21	32	6	
Do	Dec. 29-Feb. 22	380	138	

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OLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 9, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
China:				
nam	July 1-Oct. 31	146	67	
mbodia	Aug. 1-Oct. 31	165	74	July 1-Oct. 31, 1918: Cases, 620; deaths, 254.
ochin-China	July 1-Oct. 31	400	112	
Saigon	Oct. 7-Dec. 22	20	5	
Do	Dec. 30-Mar. 9	64	11	City and vicinity.
onkin	July 1-Oct. 31	20	1	
enoa	Jan. 9-Mar. 15	4	2	
essina	Mar. 2-16	3		Cases reported in several localities in Province.
alermo	Jan. 31-Apr. 1	30		
urin	Jan. 27-Mar. 2	8	2	
obe	Oct. 26-Dec. 28	186	46	
Do	Dec. 29-Mar. 22	499	165	
agoya	Mar. 2-15	2		
aihoku	Jan. 15-Mar. 18	146	18	Island of Formosa.
okohama	Jan. 20-26	1		
ast Java				Oct. 7-Dec. 31, 1918: Cases, 22; deaths, 1. Jan. 1-21, 1919: Cases, 3; deaths, 3.
Surabaya (district)	Oct. 7-Dec. 31	16		
Do	Jan. 1-7	1		
Do	Jan. 15-21	2	2	
id-Java				Sept. 25-Dec. 18, 1918: Cases, 172; deaths, 3. Jan. 24-30, 1919: Case, 1.
est Java				Oct. 2-Dec. 11, 1918: Cases, 809; deaths, 263. Dec. 27, 1918—Feb. 27, 1919: Cases, 207; deaths, 43.
Batavia	Oct. 2-Dec. 11	185	151	
Do	Dec. 27-Feb. 27	41	25	
nia				Sept. 1-Oct. 16, 1918: Cases, 44.
uria:				
iren	Jan. 15-21	1		
Do	Feb. 22-Mar. 7	2	2	
otamia:				
gdad	Oct. 11-Dec. 27	308	97	
Do	Dec. 28-Feb. 2	8		
):				
idad Juarez	Nov. 24-30	1		
Do	Mar. 29-Apr. 5	1		
xico City	Sept. 22-Dec. 28	23		
Do	Dec. 29-Mar. 22	12		
ra Cruz	Feb. 10-Apr. 12	2	1	
ndland:				
Johns	Dec. 6-20	4		
Do	Dec. 28-Mar. 14	21		
Do	Mar. 22-Apr. 18	12		Outports, 12 cases.
tports—				
Avondale	do	4		
Blaine Harbor	Dec. 14-20	2		
Bay of Islands	Jan. 11-17	6		
Do	Feb. 15-21	10		
Bay Roberts	Dec. 21-27	1		
Bonavista	Jan. 26-31	1		
Brigus Junction	Mar. 1-28	3		
Bryants Cove	Dec. 7-13	3		
Burin	do	4		
Coleys Point	Dec. 14-20	1		
Curling	Jan. 26-31	3		
Frenchmans Cove	Feb. 1-7	1		
Humbermouth	Mar. 15-21			Present.
Kings Cove	Jan. 18-Mar. 14	2		
Little Paradise	Feb. 9-14	1		
McIvers	Feb. 1-7	15		
Merasheen	do			Present.
Mercers Cove	Feb. 9-14	1		
Middle Arm	Feb. 1-7	40		Bay of Islands.
Mortons Harbor	Mar. 8-14	1		
Musgrove Harbor	Dec. 7-13	4		
Do	Jan. 11-17	6		Feb. 7, 1919: Present.
Paradise	Dec. 7-13	60		Placentia Bay.
Petitforte	Feb. 15-21	1		
Saddle Hill	do	1		Harbor Grace.
Springdale	Feb. 1-Mar. 7	7		
St. Georges	Feb. 1-Mar. 28	32		Other outports Mar. 29-Apr. 11, 1919: 14 cases.
St. Jacques	Jan. 18-24	2		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 9, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Panama				Aug. 1–31, 1918: Cases, 123, occurring at Colon, Panama, and points in the interior. Jan. 1–25, 1919: Cases, 28.
Colon	Dec. 15–21	1		
Do	Dec. 29–Feb. 9	8		
Philippine Islands:				
Manila	Nov. 2–16	5	3	
Do	Dec. 29–Mar. 22	34	17	Varioloid, 13.
Portugal:				
Lisbon	Nov. 16–Dec. 28	843		
Oporto	Mar. 9–23	43	22	
Portuguese East Africa:				
Lourenco Marques				July 1–Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1–3	4		
Do	Jan. 17–23		1	
Do	Feb. 1–Mar. 15	16	1	
Spain:				
Barcelona	Jan. 9–Feb. 11		5	
Do	Feb. 19–Mar. 11	2		
Bilbao	Jan. 1–Feb. 20	6		
Cadiz	Oct. 1–Dec. 31	18		
Do	Jan. 1–31		17	
Madrid	Sept. 1–Oct. 31	153		
Do	Jan. 1–Feb. 28		74	
Seville	Nov. 1–Dec. 31		8	
Do	Jan. 1–31		3	
Valencia	Nov. 10–Dec. 21	40	9	
Do	Dec. 29–Jan. 25	98	10	
Do	Feb. 16–Mar. 8	160	17	
Straits Settlements:				
Penang	Oct. 6–12	1		
Singapore	Feb. 2–22	3		
Sweden:				
Stockholm	Feb. 2–8		1	
Union of South Africa:				
Cape Town	Aug. 1–30	1		
Do	Dec. 21–Jan. 31	1		
Johannesburg	Aug. 1–Oct. 31	12		Nov. 1–30, 1918. Cases, 4.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1–30	1		
Austria-Hungary:				
Hungary	Sept. 2–8	2		Sept. 9–Nov. 3, 1918: Cases, 96; deaths, 8.
Budapest	Sept. 9–Nov. 3	59	2	
Pressburg	....do	11	1	
Brazil:				
Ceara	Sept. 14–21	1		
Rio de Janeiro	Dec. 15–22	2		
Do	Dec. 29–Feb. 15	28	3	
São Paulo	Jan. 13–19	3		
Bulgaria:				
Acteven	Mar. 10			Present.
Rustchuk	....do			Do.
China:				
Antung	Dec. 2–15	2		
Do	Jan. 6–Mar. 30	2	1	
Chosen (Korea):				
Seoul	Jan. 1–31	2		
Colombia:				
Barranquilla	Nov. 8–Dec. 28		2	
Do	Jan. 5–Mar. 8	2	3	
Egypt:				
Alexandria	Oct. 14–Dec. 31	85	36	
Do	Jan. 1–Mar. 25	235	92	Confined to one quarter of city and mostly to natives. Oct. 20–Nov. 7, 1918: Cases, 12; deaths, 1.
France:				
Marseilles	Mar. 1–31		31	Apr. 26, 1919, present in two civil and two military prisons.

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LERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 9, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
ıny				
eslau	Sept. 29–Oct. 19	12	8	
ımbinnen district	Oct. 20–Nov. 7	1		
esden	do	1		
telswald	do	1		
idullahutte	do	1		
nigsberg	Sept. 29–Oct. 19	3	1	
nigshutte	Oct. 20–Nov. 7	1	1	
gdeburg	do	2		
stalten	Sept. 29–Oct. 19	7	2	District of Allenstein.
pein district	Oct. 20–Nov. 7	5		
Britain:				
rk	Feb. 2–22	4		
sgow	Dec. 22–28	5		
Do	Jan. 5–Feb. 8	9	1	
Do	Mar. 9–15	1		
:				
hens	Mar. 8	2	2	
oniki	Sept. 29–Dec. 21		34	
Do	Dec. 29–Feb. 15		78	
rl	Feb. 3–9	19		In soldiers returning from Black Sea.
ples	do	3		Do.
ranto	do	2		
gasaki	Nov. 10–Dec. 29	13	4	
Do	Dec. 30–Mar. 16	30	4	
st Java				Oct. 7–21, 1918: Cases, 5.
Surabaya	Oct. 7–21	4		
l-Java				Sept. 25–Oct. 16, 1918: Cases, 3.
st Java				Oct. 2–28: Cases, 31; deaths, 6.
Batavia	Oct. 2–23	15	4	
nia				Sept. 1–Oct. 26, 1918: Cases, 539; deaths, 26.
nia:				
ma	Mar. 17			Present.
rus	Mar. 21			Do.
ala	Mar. 17	300		Estimated.
tamia:				
dad	Oct. 5–Dec. 27	2		
Do	Dec. 28–Jan. 31	4		
ascalientes	Feb. 2–23		3	
Do	Mar. 24–Apr. 13		3	
delajara	Nov. 1–Dec. 31	4	1	
Do	Jan. 1–Feb. 28	2	2	
ico City	Sept. 22–Dec. 28	434		
Do	Dec. 29–Mar. 29	341		
nds:				
sterdam	Dec. 8–14	1		
Do	Jan. 12–18	4		
t	Feb. 26			Present.
lem	do			Do.
len	do			Do.
burg	do	5	1	Mining district.
erdam	Feb. 2–Mar. 22	493	87	Jan. 30–Feb. 27, 1919: Cases, 462; deaths, 46.
edam	Feb. 26			Present. Sept. 29–Oct. 26, 1918: Cases, 572; deaths, 50.
t	Sept. 29–Oct. 26	55	8	
saw	do	111	13	
l:				
a	Mar. 24			
rto	Mar. 8–15	184		
ıngel	Jan. 15–Mar. 1	197	43	
ine				Apr. 5, 1919: Reported to be spreading.
				Do.
rade	Feb. 5	62		Among soldiers and prisoners.
ivostok	Sept. 1–Dec. 30	43		
Do	Jan. 17–Mar. 15	143	15	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 9, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in most interior towns.

YELLOW FEVER.

Brazil:				
Bahia	Jan. 12-18	2		
Pernambuco	Oct. 1-Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29-Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1-30	1		
Do	Mar. 1-15	1		
Catarama	Feb. 1-15	1		
Chobo	Jan. 1-15	1		
Daule	....do	1	1	
Duran	Nov. 1-Dec. 31	3	3	
Do	Jan. 16-Mar. 15	5	1	
Guayaquil	July 1-Dec. 31	336	177	
Do	Jan. 1-Mar. 15	123	67	
Hacienda Vainilla	Feb. 16-28	1		
Milagro	Nov. 1-15	1		
Do	Feb. 1-Mar. 15	2	1	
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-Feb. 28	2	2	
Payo (Hacienda)	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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UBLIC HEALTH REPORTS

.84 MAY 23, 1919 No. 21

IES IN RELATION TO MOSQUITO CONTROL IN PONDS.

By SAMUEL F. HILDEBRAND, Ichthyologist, United States Bureau of Fisheries.

I. Introduction.

ıe United States Commissioner of Fisheries, in response to a ɔst from the United States Public Health Service for an ichthyst, detailed the writer to cooperate with the public health ɔrities of the extra-cantonment zone of Camp Hancock, Augusta, in an antimalarial campaign. The duty assigned to the author an investigation of the effectiveness of fishes as eradicators of ıquatic stages of the mosquito, and the conduct of such operas would promise secure "fish control" in the extra-cantonment where there were many swamps, ponds, and small lakes in ı control by oiling was impracticable. This area covers a terriapproximately a mile wide surrounding the camp, the city of sta, and a belt about a mile wide surrounding the city limits. ɜwamps, fortunately, were nearly all drainable, but the ponds mostly so situated and of such a nature that draining was either ıcticable or impossible. The ponds, however, presented a situwhich offered excellent opportunites for testing the practical of fishes as eradicators of mosquito larvæ and pupæ. Experiɜ were at once started and observations were continued from ı, 1918, to November 8, 1918. Much credit for the success of ɾork is due the local authorities of the United States Public h Service for their excellent cooperation in furnishing labor, ɔortation, and other facilities for conducting the investigation. ıte a number of species of fishes have been mentioned by writers ınection with the mosquito problem. The usefulness of some of in aquaria and small pools, at least, is well known, but accurate ıation as to their effectiveness in larger bodies of water, and ally in places where the immature mosquito finds protection ɡ plants or débris, is largely wanting. The summer's investiı was almost wholly devoted to the determination of the practiılue in antimalarial work of the top minnow, *Gambusia affinis* l and Girard).

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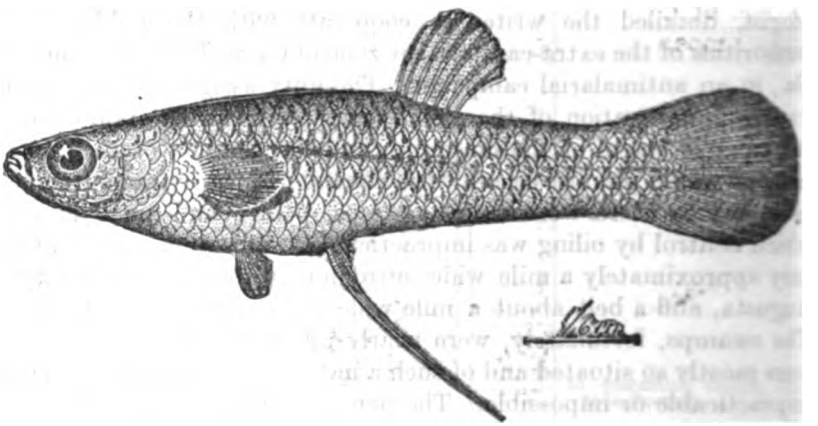
The experiments were conducted in a large series of ponds which afforded many different conditions. It is the writer's intention to relate how the investigation was conducted and to mention results and conclusions. It is hoped that the value of the top minnow may become better understood thereby and that the observations reported will be of help to those who in the future may wish to employ this useful little fish in antimalarial work.

II. General Topography of Augusta and Surrounding Territory.

The city of Augusta is situated on the Savannah River, in a low and rather flat valley, and because of the recurrence of floods and the consequent danger to life and property, a levee was constructed between the river and the adjacent territory. However, there is a considerable elevation westward or toward the "Hill" section of the



Gambusia affinis (male).

city, beyond which lies Camp Hancock. The one-mile belt surrounding the city extends across the Savannah River and includes a section of South Carolina. There were many swamps in this rather flat territory, but fortunately most of these were drainable and have been eliminated by the United States Public Health Service in cooperation with the authorities of Richmond County and the city of Augusta. In addition to the swamps there are many ponds. Nearly all of these are artificial and they vary in size and depth. Drainage, in most instances, is impracticable, if indeed not impossible. The majority of these ponds were made in the manufacture of brick, an industry which was started in Augusta in about 1808. The clay pits made by these manufacturing concerns, because of the flat nature of the country, soon become filled with water. Sometimes after hard rains the water is pumped out and digging is resumed in the old pits, but frequently the digging machines are moved. Thus new ponds are being formed constantly. There are more than one hundred of

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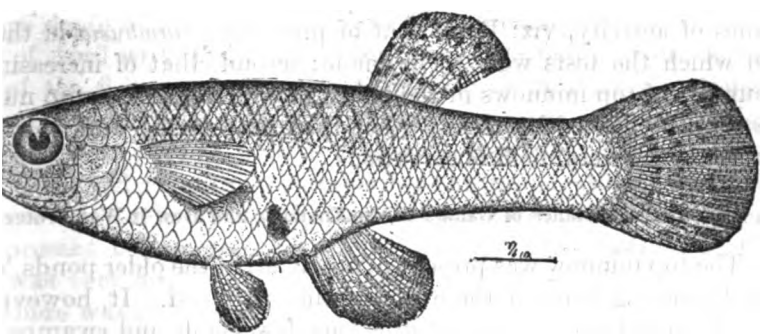
e clay pits in the territory under protection, and in addition there a number of ponds or lakes which were made for the purpose of ishing a water supply, or for water power.

ıese ponds present a variety of conditions. Some of them are old and have become partly filled with sediment; the shores often gently sloping and much aquatic vegetation is present. ı ponds usually furnish an ideal environment for the support of ıuito larvæ. The newer ponds generally have steep shores;) is not much vegetation, but considerable wave action, and as a these ponds are not well suited to prolific mosquito breeding.

Gambusia Affinis and the General Plan Pursued in Testing Its Value in Anti-Mosquito Work.

mbusia was selected for the present tests because, first, it seeks)od at the surface, which appears to make it especially suitable ntimosquito work; second, it lives and thrives under a large



Gambusia affinis (female).

y of conditions and especially in water suitable for the support squito larvæ; third, it proved to be quite common in the extra- ıment zone and adjacent territory; fourth, it is very prolific; ifth, its usefulness in destroying mosquito larvæ in aquaria)untains was already well known.

s fish does not lay eggs, but gives birth to well developed and ıctive young. It, therefore, requires no special environment, st other fishes do, for depositing and hatching the eggs. Young season were noticed for the first time on April 24, and during ter half of October a gravid female still occasionally appeared ; collections. The author,[1] working with *Gambusia* at Beau- J. C., found that it breeds throughout the summer and that a rood is produced at intervals of about one month or six weeks. s observed that a single female gave birth to six broods of during a single season. The number of young produced at

[1] Hildebrand, Samuel F., Report U. S. Commissioner of Fisheries, Appendix VI, 1917, p. 6.

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one time appears to bear a direct relation to the size of the female, a large female producing many more young than a small one. The largest brood observed by the writer numbered 63, but Smith,[1] working with fish from the Potomac River, found 100 in a single brood. The young are approximately one-half inch in total length when born; they are very active and are apparently much better adapted to begin the struggle for an existence than most fish hatched from eggs. They, in fact, are ready to begin the work of destroying mosquito larvæ at once, for the writer has seen them attacking and eating small and even medium-sized mosquito larvæ in aquaria before they were a day old. *Gambusia* gains growth rapidly and the earliest broods of the season, born in April and May, become sexually mature and produce young when four to five months old. The later broods of course do not produce young until the following season.

The general plan pursued in testing the practical value of the top minnow in antimalaria work may be divided into three principal lines of activity, viz: First, that of protecting *Gambusia* in the area in which the tests were to be made; second, that of increasing the number of top minnows in the ponds in which the mosquito nuisance was to be abated by means other than protection; and, third, that of making careful field observations.

IV. The Abundance of Gambusia, Its Enemies, and How It Was Protected.

The top minnow was present in nearly all of the older ponds, doubtlessly having reached these during times of flood. It, however, was not found abundant, except in a very few ponds and swamps. The common local practice of using *Gambusia* for bait for larger fish without doubt resulted in keeping the top minnow from becoming more abundant. Then there were certain ponds with insufficient shallow water to provide protection for the minnows from larger fish, and in at least one instance a lake had become greatly overstocked with predacious fishes, so that there was a great dearth of food. This lake is situated in Allen Park, within the city of Augusta. It had been artificially stocked with large-mouthed black bass, locally known as "trout," in addition to several species which probably reached it during floods. Bass of 3 inches and upward in length were almost constantly present in very shallow water, preying on the top minnows. Sunfishes were also present in the shallow water, but it was not observed that they actually fed on the minnows. In August it was quite evident that fewer *Gambusia* were present in this lake than there were in April, notwithstanding the fact that approximately 18,000 minnows had been introduced from other

[1] Smith, H. M., Science, n. s., vol. xxxvi, 1912, p. 220.

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ces during the intervening months. Other ponds apparently stocked with sunfishes and bass, and which certainly did not better protection for the minnow than the lake in Allen Park, stocked with *Gambusia*, but in none of these did such disastrous lts ensue. In Allen Park all fishing was prohibited, while in the r ponds there was a limited amount of hook and line fishing. entire prohibition of fishing in Allen Park doubtlessly accounts for great abundance of predacious fishes, and the shortage of food e it necessary for the fish to venture into shallower water than ordinarily do in search of food. Later when an effort was to give *Gambusia* a chance of survival in Allen Park, it was ed that the shortage of food was so great that cannibalism had ubtedly prevailed.

e following experiment shows that the common local species of shes are not serious enemies of *Gambusia*. It, therefore, is certain that the bass was the chief enemy of the minnow in Park. An old pond, measuring about 75 by 50 feet, with an ge depth of approximately 5 feet, was stocked during the first of April with about 3,000 sunfishes. Probably about 90 per of the fish were bream, *Lepomis incisor* (Cuvier and Valenes), and the others were warmouth and a few of other species. pond was already well stocked with *Gambusia*, and it doubtpossessed conditions suitable for the propagation of the top ow, but probably not for that of sunfishes. However, there present before stocking a few sunfishes. The bottom of the was very muddy, the shore edges were almost free of vegetathere was little algæ and the water was quite foul. Nearly all sunfishes lived, so far as known, and the top minnow made a le increase during the summer. It undoubtedly is true that *usia* is not as abundant in this pond with the large number of hes present as it otherwise would have been, but the expericertainly shows that the bream is not very destructive to the innow.

ambusia in a few instances needed protection from natural en- but much more generally from man. The top minnow had ie quite a favorite bait for larger fish, and wherever this fish airly common, fishermen and bait collectors were frequently atching it with small seines and dipnets. This practice quite ily did more than any other one thing toward preventing *Gam-* from becoming more abundant. Consequently, it was thought ible to publish a notice in the local newspapers, explaining that sh was useful in destroying the wiggle-tail and asking fisher- o kindly discontinue using it for bait. In addition, a placard osted at each pond, stating that the small fish were protected ealth measure and that they were not to be used for bait. The

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response to these requests was most cordial, as not an offender was seen.

Several ponds with steep shores provided very little shallow water and the top minnow did not thrive. These ponds supported larger fish, including the large-mouthed black bass, and it is believed that they destroyed the minnows. The chief protection which *Gambusia* finds from the larger predacious fishes, appears to be shallow water. An effort, therefore, was made to provide this protection in the above-mentioned ponds by grading the shore at several points in each pond. The difficulty encountered in the pond in Allen Park has already been mentioned. This greatly overstocked lake was seined and a large number of predacious fishes were removed. It was then restocked with *Gambusia*, and after that, bass were not observed feeding on the top minnow. The provisions against natural enemies were made too late in the season to bear very evident results during the present investigation.

V. Means and Methods Employed in Stocking Ponds With Gambusia.

Minnows for stocking ponds were secured mainly from two sources: first, from swamps within the protected area which were being drained; and second, from waters outside of the extra-cantonment zone, from places where minnows did not appear to be needed. Large numbers of minnows were secured from these sources and placed in ponds where few or none were present.

One pond, about 100 by 30 feet, with an average depth of about 3 feet, was used as a "hatchery." This pond has a very muddy bottom and it supports much algæ and several attached plants. All fish were removed from this pond. Then a partition, composed partly of a dam and partly of wire netting, was built across the pond. About 3,000 adult female *Gambusia* were placed in the larger compartment. No record was kept of the number of males which were introduced, as this is relatively unimportant,[1] but there were probably not more than 10 to each 100 females. The purpose of dividing the pond into two compartments, using a one-fourth inch wire screen for a portion of the partition, was to give the young fish an opportunity to migrate to that section of the pond where they could not be followed by the adults. This was thought advantageous because of the cannibalistic habit of *Gambusia*, which the mother, in confinement at least, so impressively displays by eating her own young oftentimes nearly as rapidly as they are born. The one-fourth inch mesh, however, proved to be a little too large and some of the adults succeeded in getting through it. The reproduction in this hatchery, nevertheless, exceeded all expectations. This pond,

[1] Hildebrand, Samuel F., Report U. S. Commissioner of Fisheries, Appendix VI, 1917, p 7.

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g conveniently situated, furnished a ready supply of top minnows
iquaria, fountains, pools, and wells wherever they were found to
eeded or as requests for them were received.

very useful net for collecting top minnows is a small bobbinet
). The one used by the writer was about 12 feet long and 3 feet
. Such a net, if made of a good grade of netting, is light and
ble, and it can be quickly and easily handled. A dipnet, also
e of bobbinet, was used to some advantage in places where there
so much vegetation that a seine could not be operated.

VI. Observations and Experiments.

eld observations were made at all ponds in the protected zone
ore or less definite intervals of one week each throughout the
tigation. These were often extended beyond the protected
for the purpose of obtaining checks on the effectiveness of the
within the zone.

early as March 29 a certain pond was found to be fairly alive
mosquito larvæ and pupæ. Further investigation proved that
sh were present. Top minnows were then placed in the pond
ne purpose of observing whether or not the fish would destroy
arge numbers of immature mosquitoes. The fish, however,
ed in less than 45 minutes. Since the pond was near that por-
of the Georgia Chemical Works where sulphuric acid is manu-
red, the presence of a chemical fatal to fish life was at once
cted. A litmus-paper test gave a strongly acid reaction.
the first purpose of the experiment failed, it, nevertheless,
earned that mosquitoes can breed in water so strongly acid
Gambusia is killed almost instantly thereby. There, however,
nother pond very near the acid pond and in appearance very
r to it. This one was well supplied with top minnows in ad-
to a few food fishes, and it was entirely free of mosquito

As it did not seem reasonable that mosquitoes would select
id pond in preference to the unpolluted one for breeding pur-
the only apparent logical conclusion was that the absence of
uito larvæ in the latter was due to the presence of natural
es or fish.

ther situation very similar to the one discussed in the preced-
ragraph was not far away, for there were nearly end to end an
wamp and the pond previously referred to as the hatchery.
eles bred in the acid swamp throughout the season, except as
pted from time to time by the application of oil. The hatch-
nd, which was evidently well suited for the support of *Anoph-*
rvæ, was, nevertheless, free from them, except when the
tion became dense and provided protection.

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On April 1, mosquito larvæ of the *Culex* type were found in a ditch, in several pools, and in a large pond. These waters were all free of débris and vegetation. The pond had steep shores and it was very clean. It was one of the newer brickyard ponds and no fish were present. All of these places, being close together, were stocked with *Gambusia* at the same time. Only 6 fish were placed in each of the pools, which were about 10 to 12 feet long, about 2 feet wide, and very shallow. Each pool supported thousands of mosquito larvæ, but in about two weeks they were made entirely free of wrigglers by the fish and remained so until they became dry later in the season. The presence of comparatively few skins showed that not many of the larvæ reached the adult stage. The ditch referred to was approximately 30 feet long and 1 foot wide. Mosquito larvæ were especially abundant in it. About 200 top minnows were placed there and in two weeks it was completely free of wrigglers. Mosquito larvæ were seen only along the shore of the big pond. It was at first stocked with about 1,500 *Gambusia*, but later several thousand more were added. The larvæ in this pond, too, disappeared in about two weeks from the time the first fish were introduced and none were again seen until September. By that time the shores had become overgrown with vegetation which furnished protection for *Anopheles* larvæ against fish. This vegetation was cut and the shores were raked. A large school of top minnows followed the workmen, destroying the immature mosquito and other insect larvæ as quickly as their hiding places were destroyed.

It was possible in several instances to connect ditches and swamps which were thickly infested with mosquito larvæ with ponds that were well supplied with top minnows. Wherever this was done, large numbers of fish entered these waters and destroyed the mosquito larvæ in a surprisingly short time.

For the purpose of comparison and as further evidence of the value of *Gambusia* in controlling mosquito breeding two other small ponds are worthy of mention. These ponds are situated at the intersection of the tracks of the Georgia Central and the Belt Line railroads, and they are of about equal size. The top minnow had reached one of the ponds from an unknown source, and it was entirely free of mosquito larvæ. The other was without fish, and mosquitoes were breeding in it in abundance. The inference, in the absence of any evidence to the contrary, of course, is that the top minnows destroyed the mosquito larvæ in the first pond.

During the latter part of October two new brickyard ponds were found to be breeding large numbers of mosquito larvæ. The ponds had become supplied with some vegetation; the mosquito larvæ, however, were not confined to these hiding places, but were quite generally distributed over the ponds, and could be seen in perfectly

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FIG. 2.—SECTION OF HATCHERY.

Notice reads: "Small fish in this pond are protected by the United States Public Health Service as a health measure, and must not be used for bait."

FIG. 3.—SECTION OF HATCHERY SHOWING PARTITION BETWEEN PONDS (A PORTION OF THE GEORGIA CHEMICAL WORKS IN BACKGROUND).

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FIG. 4.—SPRAYING OIL ON AN ACID SWAMP IN WHICH FISH CAN NOT LIVE BUT WHICH SUPPORTS ANOPHELES LARVÆ.

FIG. 5.—SECTION OF CLEAN SHORE OF A POND WHERE MOSQUITO LARVÆ WERE ABUNDANT BEFORE INTRODUCING TOP MINNOWS.

FIG. 6.—SHOWING GROWTH OF AQUATIC GRASS IN CORNER OF POND. SUCH GRASS FURNISHES EXCELLENT PROTECTION FOR MOSQUITO LARVÆ.

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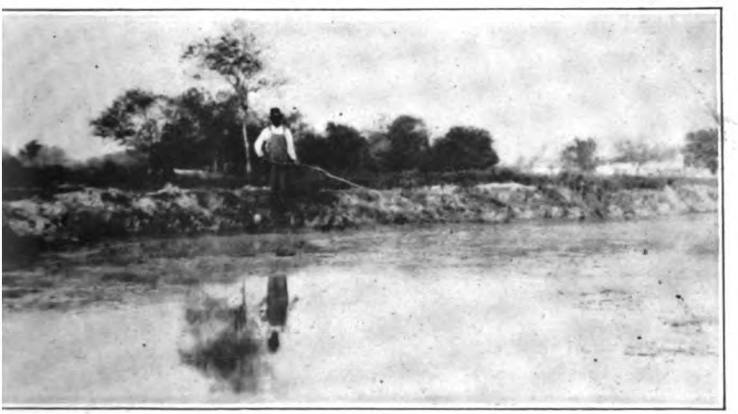
. 7.—AQUATIC GRASS GROWING ALONG THE SHALLOW EDGE OF A POND WHERE IT FORMS PROTECTION FOR MOSQUITO LARVÆ.

. 8.—FLOATING PLANTS OF MYRIOPHYLLUM AND DÉBRIS WHICH PROVIDE PROTECTION FOR MOSQUITO LARVÆ.



9.—TREATING POND WITH COPPER SULPHATE FOR KILLING ALGÆ. BORER IS DRAGGING A SMALL BAG OF THE CHEMICAL THROUGH E WATER BY MEANS OF A POLE.

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FIG. 10.—SPRAYING OIL ON ALGAL PADS TO DESTROY THEIR USEFULNESS AS HIDING PLACES FOR THE IMMATURE MOSQUITO.

FIG. 11.—SECTION OF POND SHOWING PRESENCE OF WATER LILIES

FIG. 12.—RUSHES GROWING IN END OF POND. THESE PLANTS RARELY PROVIDE PROTECTION FOR MOSQUITO LARVÆ.

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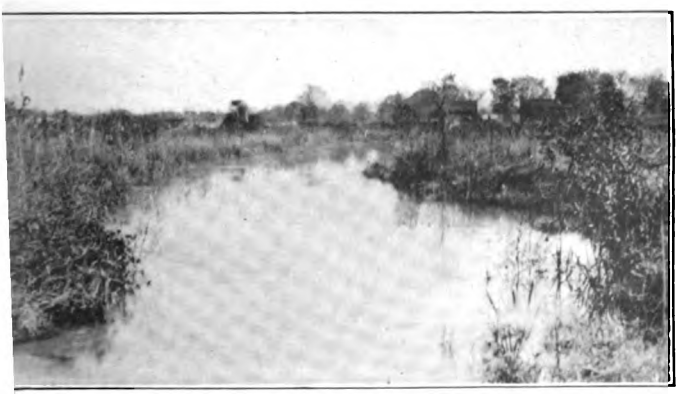
.—TALL RUSHES AND GRASSES WHICH DO NOT PROVIDE PROTECTION FOR MOSQUITO LARVÆ.

—POND SUPPORTING DENSE VEGETATION CONSISTING PRINCIPALLY OF SMART WEEDS WHICH DO NOT PROVIDE PROTECTION FOR MOSQUITO LARVÆ.



ECTION OF POND SHOWING ABUNDANT GROWTH OF TALL TION WHICH DOES NOT PROVIDE MUCH PROTECTION FOR TO LARVÆ.

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FIG. 16.—DISTANT VIEW OF POND. MUCH MARGINAL VEGETATION WHICH USUALLY FURNISHES SOME PROTECTION FOR MOSQUITO LARVÆ.

FIG. 17.—SHOWING MARGINAL VEGETATION REMOVED.

FIG. 18.—SPRAYING OIL ON ALGAL PADS.

In foreground is seen some of the aquatic grass, Hydrochloa caroliniensis, which provides excellent protection for mosquito larvæ.

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ıter. *Anopheles* larvæ previously had been noticed only once
om all protection, and then, as now, in a pond not stocked with
n October 23 about 1,000 *Gambusia* were placed in one pond
other was left as a control. On October 26 no pronounced
ın in the number of larvæ in the pond which had been stocked
iceable. On October 29, however, a remarkable decrease
dent, only a few larvæ being left, and these were found in
on. At the end of this time the immature mosquitoes in
r pond (control) were as abundant as ever.

similar experiments and observations could be mentioned,
he results for all were nearly identical it is not advantageous
). It then may be stated that wherever mosquitoes were
; prolifically *Gambusia* was not present, but, if introduced,
ɔ breeding was eliminated or at least greatly reduced. Wher-
complete elimination of mosquito larvæ did not result, if
ɔ top minnows were present the immature mosquitoes were
ɔted by vegetation or débris that they could not be detected
ɔd by the fish.

ıatic plants, however, do not furnish protection for mosquito
d pupæ against fish, and some even may be repellent. The
-named plants appeared to provide good protection and
ɔnsiderable trouble during the investigation: *a.* The aquatic
ydrochloa caroliniensis; b. "Coon-tail moss," a species of
llum; and *c.* Algæ. The aquatic grass grows in shallow
l along the shores. It has many slightly submerged leaves
ɔh the horizontally floating or swimming *Anopheles* larvæ
t of sight and out of reach of fish. Wherever this plant
ne *Anopheles* larvæ are almost sure to be present regardless
ındance of *Gambusia.* It, therefore, is obvious that if this
ırs in ponds in which mosquito control is desired, it must
d. This may be done by cutting and raking, or if growing
d it may be pulled up by the roots.

nt locally known as "coon-tail moss" causes trouble only
ɔcomes detached and rises to the surface. This plant was
only a few ponds in which an endeavor was made to
ɔquito control, and it caused considerable trouble in only
ordinarily attached to the bottom, but in this instance
e plants became detached from time to time and came to
ɔ. There each plant collected more or less débris, algæ
g its branches and thus formed a mass in which both
osquito larvæ found protection. This floating mass must
d from time to time, and can be done best on a windy
t drifts inshore.

m form mats which float at or near the surface. Mosquito
icularly *Anopheles,* find protection from fish over and in

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5. The number of top minnows necessary in a body of water in order to secure mosquito control depends largely upon the conditions which prevail with respect to places of protection, i. e., a much smaller number of *Gambusia* is necessary, if the water is fairly free of hiding places for mosquito larvæ against fish, than if the reverse is true.

ANTENATAL AND NEONATAL FACTORS IN INFANT MORTALITY.

An extraordinarily helpful analysis of some of the causes of infant mortality is presented by Ballantyne in an article entitled "Antenatal and neonatal factors in infantile mortality," published in Maternal and Child Welfare, October, 1918. Inasmuch as a correct understanding of these factors underlies all effective preventive measures undertaken by health officers to lower the infantile death rate, we reproduce here the following abstract of this valuable analysis:

The author points out that at the very center of the problem of the reduction of infantile mortality lie the evaluation and analysis of the causal factors which are responsible for that loss of young lives which is still, notwithstanding all that has been accomplished in prevention and treatment, only to be fitly characterized as appalling.

On account of the defects in statistics it is not possible to know what is the total loss of young life which occurs before birth, at birth, and during the first year after birth. Some babies die in the first year of life from postnatal causes, such as the various zymotic maladies, improper feeding, defective housing, etc. Others die because of antenatal conditions, such as prematurity of birth, congenital malformations, debility, etc. Not a few die from both antenatal and postnatal causes. It is in the first month of life that these two factors tend to unite in their attack upon the newborn infant. It is at this age, after birth, that the antenatal factor is acting most powerfully, and it is at this time also, that the postnatal factor has a character which differs so markedly from that which it possesses later. Somewhere between one-third and one-half of all the deaths which occur in the first year of life take place in the first four weeks of it. Obviously, the neonatal period is a most critical one. If deaths were evenly distributed over the first year of life, one-thirteenth of them should occur in these first four weeks; but instead of that, never less than one-third of them occur then. If the fatalities of the first 4 weeks were to be continued during the remaining 48 weeks, the infantile mortality rate for the first year of life would be over 500 per thousand live births instead of 100, which it is at the present time. On the other hand, if the deaths in the first 4 weeks were to be reduced to the same proportion as those during the subsequent 48 weeks the

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le mortality rate would fall to something like 70 per thousand
rths. The first four weeks, therefore, have an importance
can hardly be overestimated.

Suggested New Rates in Statistics.

author suggests the use of the following new rates in studying
mortality:
Conception rate.
Miscarriage rate.
Stillbirth rate.
Neonatal death rate.
r (*c*) the author urges that it be made possible to state (1) how
f stillbirths were prematurely born and how many had reached
term, and (2) in how many stillbirths did the death of the
infant precede the confinement of the mother, and in how
as it coincident with and caused by it.
, there must be a differentiation made between the stillbirths
re prematurely born and those which have reached the full
other words, there will have to be a premature stillbirth rate
nature stillbirth rate. Further, it must be made possible to
the stillbirths which have died before labor from those which
labor and to construct a rate for each; the former will be the
al stillbirth rate, and the latter the intranatal stillbirth rate;
er will depend mainly upon the maternal health in pregnancy,
latter mainly upon the obstetric assistance which the mother
er confinement.
cussing (*d*), the neonatal death rate, the author urges an in-
study of the deaths which occur in the first four weeks of life.
mortality tables the neonatal deaths must be stated separately
se occurring in the first 12 months. The neonatal mortality
be calculated in various ways. The one suggested is that
ortion of deaths per thousand live births which occur in the
weeks of life should constitute the rate. It might perhaps
r to include the stillbirths which occur intranatally, but in
time their inclusion would complicate matters. Again, the
ht be that for the first month of life instead of that for the
weeks; but the objection to that is that a month is less
han four weeks, and the results would be vitiated for purposes
rison. The rate suggested is that for one-thirteenth of the
uded within the infantile mortality rate, that is for 4 weeks

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Lessons from the Edinburgh Neonatal Mortality Rates.

The following table gives the Edinburgh birth rates, infantile death rates, and neonatal death rates for the years 1911 to 1917, inclusive:

Year.	Birth rate.	Infantile death rate.	Neonatal death rate.	Year.	Birth rate.	Infantile death rate.	Neonatal death rate.
1911	20.8	115	42.2	1915	17.8	132	[illegible]
1912	19.7	110	44.9	1916	17.4	100	[illegible]
1913	19.4	101	40.6	1917	16.7	123	[illegible]
1914	19.8	110	43.7				

The first thing that arrests the attention is the height of the neonatal rate. During the seven-year period it never fell below a third of the infantile mortality rate, which varied from 100 in 1916 to 132 in 1915, and averaged 113. It marked out the first four weeks of life as by far the most fatal time in all postnatal life.

The second is that the neonatal rate does not vary *pari passu* with the infantile one. In 1916 the neonatal rate was almost at its highest level, 44.8, while the infantile rate was at its lowest, namely, 100. In 1913, however, with an infantile rate of 101, the neonatal rate was only 40.6.

A third point that invites attention is the comparison of the rates in legitimates and illegitimates. This is well brought out by the following tables of rates obtaining in the city of Edinburgh:

Year.	Rates for infantile mortality.			Rates for neonatal mortality.		
	Legitimates and illegitimates combined.	Legitimates alone.	Illegitimates alone.	Legitimates and illegitimates combined.	Legitimates alone.	Illegitimates alone.
1915	132	130	151	42.9	42.7	[illegible]
1916	100	99	110	44.8	43.4	[illegible]
1917	123	113	212	41.5	38.6	[illegible]

It is quite clear that the neonatal rate must be scrutinized not only from the point of view of legitimacy and illegitimacy but from all other aspects—of housing, alcoholism, bottle and breast feeding, etc.

The fourth matter which must engage careful attention is prematurity of birth. Of the neonatal deaths in Edinburgh for the years 1915–1917 nearly one-half were attributable to premature birth. There is a considerable difference, however, between what a baby is said to have died of and the conditions which would be found on post-mortem examination. In a sense the approximate 50 per cent of neonatal deaths are due to prematurity of birth, but hardly in any case is it the sole cause; alongside of it is nearly always something else, and something which the death certificate rarely names.

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he same way, other alleged causes of neonatal death, such as y, marasmus, and debility would, on close inspection, be to be translatable into other medical terms and to represent ınd much more definite morbid conditions.

Factors in Infantile Mortality.

ıntyne gives the following summary of the factors involved nt mortality:

The antenatal factor, determined by placenta.
The intranatal factor, injuries in child birth.
The postnatal factor, the germ-laden environment.
A complexity of causes.

causes of antenatal death are comparatively simple in action ıch the unborn infant through the placenta. The fatality in ses is largely decided by the state of that organ.

causes of intranatal death are more complicated. They ıt a noncompatibility between the child about to be born powers by which its birth is to be effected. The causes of tal death can, to a great degree, be anticipated, and in many ey can be defeated by good obstetrics.

causes of neonatal death are far more complicated and are ss easy to master either in the sense of understanding or ng them.

TANT PRECAUTIONS IN ADMINISTERING ARSPHENAMINE AND NEOARSPHENAMINE.

ience has shown that the untoward results occasionally associith the administration of arsphenamine are due in a large to the use of too highly concentrated solutions of the drug, ıpid administration, and to insufficient care in rendering the slightly alkaline.

ader, therefore, may be interested in studying the following ons just issued to medical officers of the Public Health Serırding the administration of arsephenamine and neoarsphen- Careful observance of the precautions here described will ıe number of reactions from the use of these drugs.

GENERAL DIRECTIONS.

mpule, before opening, should be immersed in 95 per cent or 15 minutes in order to detect any crack or aperture not r recognizable. (Should such a breach be discovered, the of the ampule should be discarded.)

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(1) *Solution.*—Cold, boiled, freshly distilled water should be used in all cases except in the case of "arsenobenzol" made by the Dermatological Research Laboratory, in which case hot water is required. No more solution should be prepared at one time than can be given in 30 minutes.

(2) *Neutralization and alkalinization of the above solution.*—With a graduated pipette or burette add 0.9 cc. of normal NaOH for each 0.1 gm. of the drug (i. e., 5.4 cc. for each 0.6 gm.). The alkali should be added all at once and should quickly convert the acid salt solution of arsphenamine into the alkaline salt solution, or the disodium salt of the arsphenamine base. (The solution of arsenobenzol, which is hot, should be cooled before adding the alkali). This represents slightly more alkali than just enough to redissolve the precipitate formed by the addition of this reagent.

The alkali used should be standardized against normal acid. Normal NaOH is a 4 per cent solution of the c. p. product. However, if made on the basis of weight, it may be considerably less than this strength, hence the necessity for titration. It could be made up in amount sufficient for a month's use if kept in a well-stoppered bottle and exposed to the air for only a few seconds at a time when using the solution. It should be kept in a bottle that has been used for NaOH solution for some time, so that all action it causes in the glass will have occurred. Where it is impossible to have this made up at the station, it will be furnished upon request from the Hygienic Laboratory. Should the NaOH solution become cloudy or contain a precipitate, it should be discarded.

(3) *Concentration of the drug.*—It is desired to emphasize the fact that the concentration of the drug should not be greater than 0.1 gm. to 30 cc. of final solution. The practice of using concentrated solutions is not only in direct conflict with the instructions on the circular, but carries a distinct hazard to the patient.

(4) *Method of injection.*—The gravity method only should be used. Where several patients are to be injected from the same solution, the container for the solution should be graduated. If not already graduated, this can be done in a few minutes by sticking on a strip of adhesive plaster and marking the graduations on this. A convenient way to do this is to have each mark represent 30 cc., with a long mark for each 180 cc.; then, if the volume is made up so that each 0.1 gm. of drug is contained in each 30 cc., the doses can be given accurately. It is a great convenience to have a glass stopcock near the glass tubing, which serves as a window just above the needle in order to control the rate of injection. If no stopcocks are at hand, the rate can be controlled by the size of the needle and the height of the column of fluid. A No. 18 or 20 B. & S. gauge is the best sized needle.

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Rate of injection.—Operators should pay particular attention to e of administration and in no case should it exceed 0.1 gm. of 10 cc. of solution) in two minutes. This point is especially sized because it is believed that excessive rapidity of adminis- accounts for more unfavorable results in the use of arsphena- an any other one thing.

Neoarsphenamine.

principal precautions to be observed in the administration of henamine are:

Only a single ampule should be dissolved at a time. This ust not be dissolved in bulk to be given to a series of patients.

Cold water only should be used.

The dilution should be not stronger than 0.1 gm. of the drug in freshly distilled water.

A very small needle should be used, and the time of injection of e should not be less than five minutes.

JURNAL OF INDUSTRIAL HYGIENE MAKES ITS BOW.

gaged or interested in industrial hygiene have for some time need of some special periodical devoted solely to this im- branch of preventive medicine. This lack was the more l because it was realized that such a periodical would be of lue in promoting the development of industrial hygiene. It sure, therefore, to record the appearance of the initial num- e Journal of Industrial Hygiene, edited for the United States d L. Edsall, and for Great Britain by A. F. Stanley Kent. journal is to be published monthly, one volume appearing . The first number consists of two parts, of which the first part of 68 pages contains the following original articles:

rial Medicine and Surgery, A Résumé of its Development e. By Henry E. Mock.

Poisoning in American Industry. By Alice Hamilton.

oblem of Fatigue. By Reynold A. Spaeth.

one Operating: A Study of its Medical Aspects with Sta- Sickness Disability Records.

cond part, containing 19 pages, consists of an Abstract of ature of Industrial Hygiene, the material being classified different headings and covering the entire domain of the

cellence of the articles in the first number is an earnest of ich are to come. Typographically, the Journal makes a arance. The type is large and clear, and reading is still

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further facilitated by the division of the page into two columns. The absence of an editorial section is to be regretted, for in the hands of the able editors this would surely have been most interesting and helpful.

GRAVE TYPHUS SITUATION IN CENTRAL EUROPE.

Some idea of the devastating effect of typhus in central Europe and of the danger which threatens the western countries may be gained from the following translation of an appeal addressed to the international committee of the Red Cross by the president of the Austrian Red Cross on behalf of the chiefs of the sanitary service of the former Austrian monarchy. In transmitting this to the various allied Governments, the vice president of the international committee of the Red Cross, Mr. Ferriere, says:

"* * * We consider that the danger which this circular describes is very real and worthy of special attention on the part of the Governments of Europe.

"We will be grateful to you, consequently, if you would intercede with your Government in order that prompt measures be taken in this respect and that, if possible, an international medical commission may be constituted in conformity with the request of the inclosed report, to organize on the premises the necessary prophylactic measures, as was done in Serbia during the epidemic of 1915."

VIENNA, *March 7, 1919*

INTERNATIONAL COMMITTEE OF THE RED CROSS,

Geneva:

The danger of an epidemic of spotted typhus is threatening, in an alarming manner, all countries of central Europe that have suffered so intensely through the horrors of the war.

Typhus is raging in all the districts of Poland, in the country of the Jugo-Slavs, especially in Old Serbia. In the western part of this country it has become pandemic. Communities, hospitals, barracks, schools have become veritable centers of infection. The epidemic that is threatening the Central Powers from north, east, and south is rapidly spreading toward the west. Contamination is spread by the repatriated soldiers who are in a bad condition, weakened by hunger and privations, who have neither clothes nor linen and are generally covered with lice, and who, therefore, become the victims of infection. In this way this illness, almost unknown in our country, is brought into central and western Europe, into countries where the population is not partially vaccinated through the recurring appearance of the disease, as is the case in the Near East.

The impending danger has, notwithstanding actual divergences, reunited the countries of the former Austro-Hungarian Empire in a joint action of defense.

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iew of the constant spreading of the plague, the Austrian Red Society has received calls for help from all sides, especially 'oland and Ukraine. In accordance with the Austrian Depart- f Public Health, this Red Cross assembled the sanitary delegates ınd, the Ukraine, of Jugo-Slavia, and of German Austria for a ınce which took place on February 28 last. The "Conseil ıtional d'Hygiène de Prophylaxie," which had met at Buda- th the same intention of uniting all efforts in view of contend- h the typhus, had provided one of these delegates with full ty to act. The war having completely exhausted the former Hungarian States, and these, lacking all material and finan- p, can not hope by their own means to be able to put a stop constantly progressing epidemic. Quite aware of these cir- nces, the sanitary delegates decided unanimously to appeal *of the Austrian Red Cross to the International Committee of the ıss in Geneva, in order that the allied States, as well as the neu- ıers, under the emblem of the Red Cross should be required to set ıediately an international commission in view of contending typhus, and that this commission should be provided with all y financial and material aid as well as with medical help, in carry out an action of assistance and defense on the required le.*

in 1915 typhus killed thousands of people in Serbia, the l intervention of the allied countries succeeded in a com- ly short time, but only with considerable effort, in ıg the dreadful plague. It is necessary that sanitary help ɔe given in an equally generous and clear-sighted way in nd Poland, but especially in Ukraine. In order to destroy ers of contagion, modern hospitals and disinfection stations ɔe erected. Mobile sanitary formations, disinfection units, ɔratories, etc., should set to work to suppress the numberless f infection.

same time, prophylactic measures ought to be taken at all ts of entrance on the western border. Central depots for triated soldiers should be created and provided with an t stock of linen, clothes, food, medicines, disinfectants, and articles of every kind.

y the centers of contagion have progressed far into the the former Austrian countries. The small territory of annexed by the Tcheco-Slovac State had, according to the ınitary reports of the Government, 231 cases of typhus February 2 and 8. Almost daily the concentration depots ɔranians and Poles in Vienna transferred cases of typhus to tals for infectious diseases.

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The sanitary delegate of Jugo-Slavia reports an increasing wave of typhus proceeding from Old Serbia.

The conditions in the western part of the Ukraine, in former East Galicia, appear to be disastrous.

A report drafted at Stanislau on February 21 and signed by the Ukranian Secretary of the Interior, the Health Board of the War Office, and the health board of the home office, as well as by the delegate of the "Conseil d'Hygiène et de Prophylaxie" at Budapest, states as follows concerning the sanitary conditions of this country:

"All the districts of East Galicia are infected by spotted typhus and smallpox. As there are no sources of help as regards doctors, medicines, and sanitary material in the country, rapid and abundant help from without is wanted. In the former fighting zone the people live in underground excavations. They have no linen, scanty clothing, totally insufficient food, and numberless cases of oedema and scurvy. In the whole country there is the greatest need of the most primitive hygienic commodities—baths, soap, coal, etc. The means of communication are absolutely insufficient, roads almost impassable and railways destroyed, and there is a lack of experienced physicians and nurses, of hospitals for infectious diseases, of sanitary establishments, hospital linen, and disinfection establishments. Conditions seem to be similar in eastern Ukraine, but not quite as bad."

In order to understand completely the great danger of the actual typhus epidemic for the whole of Europe it is necessary to refer to the fact that the disease is extremely infectious. During an epidemic of the illness in East Galicia, the mortality amongst adults was about 10 per cent during the war. The character of the plague has become highly aggravated, probably owing to the diminished powers of resistance of the populations, and mortality has greatly increased.

According to scientific research, *the transmission of the disease is caused by the clothes louse; consequently the disease is easy to catch. The formation of centers of infection in distant localities is constantly possible; therefore no country and no people are safe from contagion.*

The danger for Europe is not alone actual but increasing because, without a uniform method of sanitation on a large scale, of the aforesaid territories, the centers of contagion will never be destroyed nor the epidemic exterminated. Europe must not only ward off a constant menacing plague but it also has a mission of civilization to perform. *Contending with typhus is a question of civilization. Almost in the heart of Europe a great part of the inhabitants live in conditions unworthy of humanity, a degree of culture that knows neither soap nor linen.*

The Ukranian authorities show us a tragic picture of the lodging, alimentation, and clothing of the population of a great part of eastern

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ia, and these conditions demand an immediate intervention
ie European powers, even if they were not a constant source
nger for the whole of Europe. For the time being, the coeffi-
of diseases is increasing on all sides.
cording to scientific research the epidemic increases during
h and April, and only attains its culminating point at the end
pril and in May; therefore, we must expect a progress of the
mic and its destructive spreading in countries of central Europe
have heretofore been spared.
can not foresee when and where the epidemic will stop. It is
t danger for the western countries, so that not only human soli-
but also the certainty of contagion—the immediate danger for the
n countries—implies a common action of assistance of all the
pean countries.
e sanitary delegates assembled in Vienna decided unanimously
arch 1 to send the following telegram to the International
nittee of the Red Cross in Geneva:

o-day's conference of all sanitary delegates of former Austro-
arian countries confirms far-spread epidemic of spotted typhus
raine, Poland, Serbia. Central and western Europe threatened.
cordance with decision of conference, Austrian Red Cross begs
Cross, Geneva, convoke immediate meeting international com-
n with all necessary authorization and means of help and equal
nce of all European countries as during typhus epidemic in
in 1915. Detailed report will follow."

undersigned committee repeats, with reference to the condition
irs described in the preceding, an urgent appeal to the Inter-
al Committee and begs that in consideration of the extreme
sness of the sanitary situation, thorough and rapid aid may be
d.
the Central Committee:

(Signed) TRAUN.

NDANCE AT FREE VENEREAL DISEASE CLINICS OPERATED IN EXTRA-CANTONMENT ZONES.

activities of the 239 free venereal disease clinics operated by,
cooperation with, the United States Public Health Service can
e understood by a consideration of the report on the operation
25 clinics situated in the extra-cantonment zone areas. These
ics, although they are in communities where the laws regarding
ppression of vice are rigidly enforced, and where the control
municable diseases is well in hand, are typical of the average
operated under the joint supervision of the State boards of
and the United States Public Health Service.

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three months.

From July 1, 1918, to April 1, 1919, there were 36,595 patients treated in these clinics. The total number of patients discharged as "probably cured" during this period was 9,769.

Average daily attendance, by months, at the free venereal-disease clinics operated in the extra-cantonment zones, July, 1918, to March, 1919, inclusive.

Clinic.	1918						1919		
	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Anniston, Ala.	.....	13.0	13.2	9.0	14.2	17.4	13.7	14.3	[illegible]
Atlanta, Ga.	58.5	50.0	85.5	97.5	80.6	79.7	94.3	84.3	[illegible]
Augusta, Ga.	31.2	22.7	.....	.....	.....	25.0	9.5	15.1	.....
Charlotte, N. C.	43.5	41.1	43.6	34.9	38.3	38.0	56.0	35.5	.....
Chattanooga, Tenn.	298.0	164.5	193.9	122.3	107.1	88.3	139.7	110.1	.....
Chillicothe, Ohio	13.7	30.4	26.7	13.5	12.8	12.3	9.1	7.4	[illegible]
Columbia, S. C.	7.5	17.2	25.2	27.5	36.3	32.0	31.4	38.0	[illegible]
Des Moines, Iowa.	43.5	45.3	24.5	.....	.....	.....	57.0	45.3	[illegible]
El Paso, Tex.	61.9	73.2	84.4	75.0	67.9	75.1	78.5	72.1	[illegible]
Forth Worth, Tex.	15.5	44.5	34.5	35.2	30.7	25.4	23.1	37.5	.....
Greenville, S. C.	77.5	75.8	75.5	40.5	43.0	55.0	49.7	43.3	[illegible]
Hattiesburg, Miss.	9.3	[1] 8.3	11.0	14.2	18.5	17.7	14.1	18.3	.....
Houston, Tex.	90.5	134.3	126.3	113.3	137.6	124.0	108.3	111.5	[illegible]
Jacksonville, Fla.	35.9	46.8	51.8	15.8	36.7	[1] 47.5	.....	.....	.....
Leavenworth, Kans.	55.5	62.0	63.8	82.6	82.1	88.6	110.6	105.4	[illegible]
Little Rock, Ark.	.....	[2] 20.0	[2] 22.0	20.0	8.9	8.4	6.5	4.4	.....
Louisville, Ky.[3]	71.8	59.3	75.5	152.5	146.6	184.0	228.0	197.8	[illegible]
Macon, Ga.	34.0	31.3	28.0	41.5	32.8	25.4	29.5	33.4	[illegible]
Montgomery, Ala.	74.0	146.5	121.1	69.5	60.9	58.0	55.8	67.4	[illegible]
Newport News, Va.	32.3	30.9	38.8	33.3	23.3	18.5	21.0	53.7	[illegible]
Petersburg, Va.	28.5	59.0	73.9	24.1	36.6	34.8	38.3	42.0	[illegible]
Portsmouth, Va.	[1] 32.0	[1] 41.0	56.2	42.5	43.7	36.2	35.0	41.8	[illegible]
San Antonio, Tex.	96.0	65.4	62.4	50.9	30.9	42.6	36.9	40.3	[illegible]
Spartanburg, S. C.	28.3	49.5	55.4	38.5	42.9	43.8	42.7	40.5	[illegible]
Waco, Tex.	.....	[2] 24.0	[2] 19.0	25.0	28.8	25.4	.....	.....	.....
Daily averages by months....	56.3	54.2	58.9	51.3	50.5	47.6	56.0	54.8	[illegible]

[1] Report for half month only. [2] First month opened. [3] Includes jail and workhouse.

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ATHS DURING WEEK ENDED MAY 10, 1919, IN CITIES.

e table following shows the registered deaths from all causes and pneumonia (all forms) and influenza combined in certain large of the United States during the week ended May 10, 1919.
e data are taken from the "Weekly Health Index," May 13, issued by the Bureau of the Census, Department of Commerce.

red deaths and annual death rates per 1,000 population in certain large cities of Jnited States, week ended May 10, 1919—Deaths from all causes, and from pneu-ia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms). Number of deaths.	Influenza and pneumonia (all forms). Annual death rate per 1,000.
N. Y.	112,565	41	19.0	C. 20.8	10	4.6
Ga.	201,732	60	15.5	C. 14.5	.....	.....
e, Md.	[2]669,981	219	17.0	A. 19.3	32	2.5
Mass.	785,245	221	14.7	A. 18.0	28	1.9
N. Y.	473,229	139	15.3	C. 17.4	.....	.....
ge, Mass.	111,432	27	12.6	A. 13.5	.....	.....
Ill.	2,506,681	653	13.1	A. 15.2	85	1.7
ti, Ohio	418,022	131	16.3	C. 16.0	.....	.....
l, Ohio	810,306	199	12.8	C. 13.0	42	2.7
s, Ohio	225,296	73	16.9	C. 18.3	12	2.8
Ohio	130,655	50	20.0	C. 19.2	5	2.0
Colo.	.....	69	.....	.....	.....	.....
r, Mass.	128,392	35	14.2	C. 17.1	.....	.....
apids, Mich.	135,450	28	10.8	C. 13.1	.....	.....
olis, Ind.	289,577	77	13.9	C. 17.8	.....	.....
y, N. J.	318,770	90	14.7	C. 17.0	.....	.....
ity, Mo.	313,785	58	9.6	C. 15.6	.....	.....
les, Calif.	568,495	126	11.6	A. 12.6	11	1.0
e, Ky.	242,707	89	19.1	C. 15.9	7	1.5
lass.	109,081	31	14.8	A. 17.4	3	1.4
, Tenn.	154,759	66	22.2	C. 21.9	7	2.4
e, Wis.	453,481	89	10.2	A. 13.0	21	2.4
lis, Minn.	383,442	77	10.5	C. 17.5	.....	.....
, Tenn.	119,215	37	16.2	C. 19.7	.....	.....
N. J.	428,784	89	10.8	C. 15.3	.....	.....
en, Conn.	154,865	37	12.5	C. 18.9	.....	.....
ans, La.	382,273	118	16.1	A. 19.4	.....	.....
, N. Y.	5,215,879	1,460	14.0	C. 16.0	246	2.5
Calif.	214,206	53	12.9	A. 10.0	.....	.....
Nebr.	180,264	45	13.0	C. 15.3	.....	.....
hia, Pa.	1,761,371	521	15.4	[3]16.7	.....	.....
h, Pa.	593,303	175	15.4	C. 20.9	40	3.5
Oreg.	.....	49	.....	.....	7	.....
e, R. I.	263,613	84	16.6	C. 12.7	9	1.8
l, Va.	160,719	46	14.9	C. 21.1	1	0.3
, N. Y.	264,856	73	14.4	C. 15.7	15	3.0
Mo.	779,951	165	11.0	C. 15.2	.....	.....
Minn.	257,699	49	9.9	C. 14.6	.....	.....
isco, Calif.	478,530	140	15.3	C. 14.6	15	1.6
ash.	.....	71	.....	.....	13	.....
Wash.	.....	25	.....	.....	.....	.....
N. Y.	161,404	39	12.6	C. 14.5	2	0.6
nio.	262,234	47	9.3	A. 14.1	4	0.8
n, D. C.	401,681	108	14.0	A. 15.9	5	0.6
, Mass.	173,650	45	13.5	C. 16.2	10	3.0

dicates that the rate given is the average annual death rate per 1,000 population for the corre-week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate opulation for the corresponding week of 1918.
tion estimated as of July 1, 1919.
based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED MAY 17.

CAMP DIX ZONE, N. J.

Measles:	Cases.
Chesterfield Township	5

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chancroid	1
Gonorrhea	5
Measles	1
Pneumonia, broncho	1
Syphilis	6
Typhoid fever	1

CAMP FUNSTON ZONE, KANS.

Junction City:	
Scarlet fever	1
Whooping cough	1
Manhattan:	
Chicken pox	11
Measles	2
Mumps	1
Scarlet fever	1
Smallpox	1
Whooping cough	2
Ogden:	
Scarlet fever	2

GAS AND FLAME SCHOOL ZONE, GA.

Chancroid:	
Columbus	1
Chicken pox:	
Muscogee County	1
Gonorrhea:	
Columbus	4
Malaria:	
Columbus	1
Measles:	
Columbus	1
Bibb City	3
Muscogee County	3
Pneumonia:	
Columbus	2
Scarlet fever:	
Columbus	1

GAS AND FLAME SCHOOL ZONE, GA.—Continued.

	Cases.
Smallpox:	
Columbus	1
Muscogee County	
Syphilis:	
Columbus	2
Girard	1
Muscogee County	1
Tuberculosis:	
Columbus	3
Typhoid fever:	
Muscogee County	1
Whooping cough:	
Columbus	3
Muscogee County	3

CAMP GORDON ZONE, GA.

Atlanta:	
Chancroid	1
Chicken pox	6
Diphtheria	1
Gonorrhea	3
Influenza	1
Measles	13
Mumps	2
Scarlet fever	1
Smallpox	3
Syphilis	2
Tuberculosis	6
Typhoid fever	3
Whooping cough	1

GULFPORT HEALTH DISTRICT, MISS.

Chicken pox:	
Biloxi	3
Gulfport	1
Lyman	1
Diphtheria:	
Biloxi	1
Dysentery:	
Pascagoula	1
Lyman	1
Moss Point	1

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PORT HEALTH DISTRICT, MISS.—continued.

	Cases.
ery, amebic:	
in	1
hea:	
oxi	2
ole	1
ss Point	1
cagoula	1
orm:	
ndard	2
za:	
s Point	1
:	
uvoir	1
Lisle	1
ıtawpa	1
hier	1
fport	11
dsboro	1
leston	1
town	2
s Point	4
agoula	3
Christian	1
port	1
tawpa	1
si	5
Point	1
g cough:	
port	3
agoula	1

CAMP A. A. HUMPHREYS ZONE, VA.

ria:	
rospinal meningitis	1
theria	1
rrhea	3
monia	1
t fever	1
ilis	1
oid fever	1

CAMP JACKSON ZONE, S. C.

:	
en pox	13
heria	1
os	2
ping cough	4
nt clinic:	
rhea	25
lis	18

CAMP LEE ZONE, VA.

g:	
rhea	4
es	1
lis	5
culosis	2

CAMP MERRITT ZONE, N. J.

ox:	
wood	15
easles:	
wood	1

CAMP MERRITT ZONE, N. J.—continued.

	Cases.
Measles:	
Englewood	3
Haworth	11
Mumps:	
Englewood	2
Pneumonia:	
Englewood	1
Scarlet fever:	
Closter	1
Demarest	1
Englewood	2
Haworth	2
Syphilis:	
Englewood	2
Tuberculosis:	
Tenafly	1

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Lauderdale County:	
Chicken pox	3
Gonorrhea	1
Mumps	1
Nitrate Plant No. 2:	
Gonorrhea	13
Influenza	3
Malaria	2
Mumps	1
Pneumonia	2
Syphilis	7

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	2
Pneumonia	3
Syphilis	3
Tuberculosis	2
Typhoid fever	1

CAMP PIKE ZONE, ARK.

Little Rock:	
Chicken pox	13
Diphtheria	1
Erysipelas	1
Gonorrhea	11
Malaria	2
Mumps	18
Pneumonia	1
Scarlet fever	4
Syphilis	4
Tuberculosis	1
North Little Rock:	
Diphtheria	1
Measles	1
Scarlet fever	3
Scott:	
Malaria	1

CAMP POLK ZONE, N. C.

Chicken pox:	
Durham	2
Raleigh	4
Gonorrhea:	
Holly Springs Township	1
Marks Creek Township	1
Neuse River Township	1
Raleigh	11

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CAMP POLK ZONE, N. C.—continued.

Measles:	Cases.
Durham	1
Raleigh	1
Scarlet fever:	
Raleigh	1
Smallpox:	
Durham	4
White Oak Township	1
Syphilis:	
Cary Township	1
Marks Creek Township	1
Raleigh	8
Tuberculosis:	
Buckhorn Township	1
Raleigh	4
White Oak Township	1
Whooping cough:	
Durham	1
White Oak Township	5

CAMP SHERMAN ZONE, OHIO.

Chillicothe:	
Scarlet fever	4
Government clinic:	
Gonorrhea	6
Syphilis	1

SOUTHER FIELD ZONE, GA.

No cases of communicable diseases reported.

CAMP TRAVIS ZONE, TEX.

San Antonio:	Cases.
Chancroid	1
Chicken pox	3
Gonorrhea	9
Scarlet fever	3
Syphilis	1
Typhoid fever	2

CAMP UPTON ZONE, N. Y.

Bellport:	
Tuberculosis	1
Brook Haven:	
Measles	1
Poliomyelitis	1
Syphilis	1
Tuberculosis	1
Riverhead:	
German measles	1

WILMINGTON SANITARY DISTRICT N. C.

Sea Gate:	
Measles	1
Wilmington:	
Gonorrhea	23
Mumps	1
Syphilis	3
Tuberculosis	3
Typhoid fever	2
Winter Park:	
Measles	4

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended May 9, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week	Last week
Annual admission rate per 1,000 (all causes)	598.23	732.6
All troops in United States	1,219.96	1,494.7
American Expeditionary Forces	348.71	441.1
Annual admission rate per 1,000 (disease only)	517.27	634.2
All troops in United States	1,029.49	1,284.1
American Expeditionary Forces	308.79	402.6
Noneffective per 1,000 on day of report	41.04	41.6
All troops in United States[1]	82.66	87.3
American Expeditionary Forces	25.04	24.7
Annual death rate per 1,000 (all causes)	6.04	6.5
All troops in United States[1]	9.33	11.9
American Expeditionary Forces	4.73	5.6
Annual death rate per 1,000 (disease only)	4.49	4.8
All troops in United States[1]	7.87	9.8
American Expeditionary Forces	3.27	3.9

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

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Cases of special diseases reported during the week ended May 9, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
				Total.	New infection.						
.....	....	....	....	43	14	....	....	....	....	9,559.20	277.75
.....	....	....	....	.....	.....	....	....	....	....	493.95	10.86
.....	1	....	....	4	4	....	....	....	1	746.01	37.01
.....	....	....	....	24	.....	5	....	....	....	911.60	73.33
.....	2	....	....	33	4	....	....	....	....	700.82	58.89
.....	1	....	....	10	6	....	1	....	6	708.35	87.92
.....	....	....	....	13	.....	....	....	....	....	649.68	35.88
.....	....	....	....	6	.....	2	....	....	....	4,682.68	69.05
.....	2	....	....	30	.....	....	1	....	1	4,927.80	97.01
s.....	....	....	....	2	.....	....	....	....	1	740.07	32.95
.....	1	....	2	11	.....	1	....	....	....	1,815.59	96.19
.....	....	....	....	2	2	....	2	....	....	3,875.95	176.67
x.....	2	....	....	4	.....	....	....	....	....	65.49	5.45
.....	....	....	1	16	11	....	....	....	1	2,161.25	112.08
.....	1	....	....	7	1	1	....	....	....	2,223.35	139.11
.....	....	....	....	9	3	....	1	....	3	1,594.66	73.24
.....	8	....	....	37	3	....	....	....	....	2,523.47	130.69
.....	1	....	....	6	.....	....	....	....	....	5,141.00	123.58
.....	5	....	....	20	10	2	....	....	3	2,622.75	127.60
.....	....	....	....	14	8	....	1	....	....	453.47	130.80
.....	....	....	....	7	3	1	....	....	....	914.31	76.78
.....	4	....	....	33	1	4	1	1	....	585.09	30.46
n Department.....	....	....	1	3	.....	....	....	....	....	442.61	20.26
partment.....	1	....	....	19	1	....	....	....	....	523.70	19.35
n Department.....	1	....	1	15	5	....	....	....	....	627.45	23.83
artment.....	....	....	....	1	.....	....	....	....	....	404.75	18.59
partment.....	5	1	....	46	.....	6	....	....	....	687.07	56.11
partment.....	1	....	....	11	.....	2	....	....	....	518.47	20.23
nps.....	....	....	....	41	3	1	....	....	1	712.04	36.96
arkation:											
n.....	8	....	....	43	.....	55	8	1	6	680.84	82.43
t News.....	23	....	....	25	11	17	2	2	1	1,235.64	32.89
s.....	....	....	....	2	.....	....	....	....	....	444.20	22.42
sciplinary Barracks.....	....	....	....	.....	.....	2	....	....	....	1,268.29	27.43
h Disciplinary Barracks.....	....	....	....	3	.....	....	....	....	....	759.23	40.88
arracks.....	1	....	....	1	1	....	....	....	....	1,232.85	35.56
rracks.....	....	....	....	8	.....	....	....	....	....	1,527.27	93.33
.....	....	....	....	2	2	....	....	....	....	2,136.98	45.20
rell.....	....	....	....	3	3	....	....	....	....	1,602.95	39.46
.....	....	....	....	9	9	....	....	....	....	544.34	21.92
.....	....	....	....	2	.....	....	....	....	....	911.68	25.97
s.....	....	....	....	1	1	....	....	....	....	1,306.04	30.69
.....	....	....	....	.....	.....	....	....	....	....	687.49	21.63
.....	....	....	....	4	.....	....	....	....	....	346.85	29.34
s small stations.....	....	1	....	5	.....	....	....	....	1	475.50	29.44
.....	68	2	5	575	106	99	17	4	25	1,029.80	52.68

ber of deaths at large camps in the United States, week ended May 9, 1919.

ıp.	Strength.	Deaths.		Camp.	Strength.	Deaths.	
		All causes.	Disease only.			All causes.	Disease only.
.....	2,981	.....	.....	Taylor.....	8,715	1	1
.....	1,158	.....	.....	Travis.....	4,493	.....	.....
.....	5,646	.....	.....	Upton.....	27,642	4	4
.....	12,159	2	2	Northeastern Department.	3,407	1	1
.....	19,447	.....	.....				
.....	6,480	1	.....	Eastern Department...	14,888	.....	.....
.....	8,164	1	.....	Southeastern Department.	6,630	2	1
.....	5,519	.....	.....				
.....	8,463	1	1	Central Department....	4,625	1	1
.....	2,670	.....	.....	Southern Department..	31,561	4	3
.....	7,017	.....	.....	Western Department..	10,231	1	1
.....	3,515	1	1	Aviation camps.....	20,019	4	.....
.....	9,528	.....	.....	Ports of embarkation:			
.....	7,603	1	1	Hoboken.....	35,825	4	3
.....	4,701	.....	.....	Newport News.....	28,767	3	3
.....	11,255	1	.....	All others.....	89,531	43	37
.....	5,708	.....	.....				
.....	2,468	.....	.....	Total	423,366	78	60
.....	12,570	.....	.....				

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Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	8.35	10.86	7.37	10.35
Dysentery	.24	.12	.14	.28
Malaria	.61	1.22	.19	.77
Venereal	70.63	71.65	34.22	40.41
Paratyphoid			.04	.08
Typhoid	.12	.12	.78	.65
Measles	2.08	1.46	2.14	1.74
Meningitis	.49	.85	.64	.65
Scarlet fever	3.07	2.97	.33	.69
Influenza	12.16	10.96	.....	.....

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended May 17, 1919.

Alabama.—State totals: Typhoid fever 4, malaria 29, smallpox 9, measles 8, scarlet fever 3, diphtheria 1, whooping cough 5, pulmonary tuberculosis 11, pellagra 1, venereal diseases 108.

Arkansas.—State totals: Malaria 51, chicken pox 36, mumps 23, smallpox 19, measles 16, pellagra 6, tuberculosis 6, influenza 5, hookworm 4, trachoma 3, meningitis 1, typhoid fever 1.

California.—Influenza: Cases reported 296. Smallpox: Los Angeles 2, Los Angeles County 3, Longbeach 4, Oakland 1, San Francisco 6, Santa Clara County 1. Typhoid fever: Los Angeles 6, Fresno County 4, Tulare County 1, El Centro 2, Blythe 1. Cerebrospinal meningitis: Los Angeles 1, San Francisco 2, Kern County 1. Poliomyelitis: San Francisco 1. Lethargic encephalitis: Santa Paula 1.

Connecticut.—Cerebrospinal meningitis: Norwalk 2, New Haven 1. Influenza, 1 case reported.

Delaware.—Diphtheria: Marshalltown 2. Measles: Frederica 1, Dover 1, East Dover 2. Pneumonia: Marshalltown 1. Scarlet fever: Dover 1, Wilmington 2. Tuberculosis: Wilmington 1, West Dover 2.

Florida.—State totals: Typhoid fever 24, Malaria 13, smallpox 6, measles 18, diphtheria 5, dysentery 8.

Georgia.—State totals: Hookworm 3, cerebrospinal meningitis 3, chickenpox 30, diphtheria 3, dysentery (amebic) 10, dysentery (bacillary) 47, German measles 2, gonorrhea 76, influenza 24, malaria 42, measles 27, mumps 31, paratyphoid fever 1, pneumonia (acute lobar) 30, scarlet fever 10, septic sore throat 9, smallpox 48, syphilis 52, tuberculosis (pulmonary) 22, typhoid fever 18, whooping cough 25.

Illinois.—Diphtheria: Cases reported 153, of which in Chicago 124, Granite City 4, Decatur 3. Scarlet fever: Cases reported 106, of which in Chicago 56, Stockton 5, Polo 5, Oglesby 5, Rockford 4,

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3. Smallpox: Cases reported 138, of which in Rock Island
ıite City 14, Cedar Point 13, Pekin 10, East Alton 9, Aledo 4,
ınt 4, Sawyerville 4, Preemption Township (Mercer County) 4,
Township (Lee County) 3, Savanna 3, Cobden precinct
County) 3, Joliet Township (Will County) 3. Meningitis:
5. Poliomyelitis: Chicago 3. Influenza: Cases reported 37,
ı in Chicago 34. Gonorrhea 181, syphilis 72.
—Chancroid: Cherokee 1, Des Moines 1. Diphtheria: Bur-
2, Cedar Rapids 1, Davenport 1, Des Moines 2, Dubuque 1,
South Fort Des Moines 1. Gonorrhea: Boone 2, Cherokee
ıcil Bluffs 8, Davenport 12, Des Moines 6, Dubuque 2,
ɔurg 1, Greene 2, Oskaloosa 3, Shenandoah 2, Sioux City 8,
d 1, Washta 1. Mumps: Fort Des Moines 2. Scarlet fever:
1, Brooklyn 1, Des Moines 4, Dubuque 2, Mason City 3,
South Fort Des Moines 1. Smallpox: Albion 1, Aurora 3,
1, Boone 13, Bradford 1, Cedar Rapids 15, Davenport 4,
ıes 6, Mason City 5, Ottumwa 5, Sigourney 3. Syphilis:
4, Davenport 2, Des Moines 2, Dubuque 2. In rural dis-
the following counties. Scarlet fever: Cherokee 1, Des
, Floyd 1, Howard 6. Smallpox: Buchanan 2, Grundy 3,
1.
.—Meningitis by cities: Colony 1. State totals: Smallpox
ıeria 16, scarlet fever 34, influenza 57.
na.—Poliomyelitis 1, meningitis 1, smallpox 39, typhoid
diphtheria 6, gonorrhea 131, syphilis 41, chancroid 22.
—Chicken pox: Milo 1, Portland 2. Diphtheria: Nilli-
Pittsfield 1, Washburn 1, Brunswick 2. Gonorrhea: Bath
ɔn 1, Calais 1, Danforth 1, Guilford 1, Limestone 1, Rum-
ımden 1, Jonesport 1, Lewiston 3, Portland 14, Rockland
ɔs: Bath 4, Baileyville 20, Portland 2, Sanford 1. Scarlet
rmington 3, Brunswick 4, Portland 1, Bath 1, Danforth
n 1. Smallpox: Brunswick 1, Van Buren 3. Syphilis:
ɔ, Portland 5, Bath 1, Lewiston 1, Harpswell, 1, Rangeley
culosis: Cases reported 8. Typhoid fever: Portland 2,
Rockland 1. Whooping cough: Portland 2, Sanford 2.
Waldoboro 11.
ıusetts.—Measles (unusual prevalence): Fall River 79,
65. Whooping cough: Haverhill, 27.
ɔta.—Smallpox (new foci): Chippewa County (Montevi-
Marshall County (Holt Township) 1, Hennepin County
lage) 1, Kanabec County (Southfork Township) 1, Wash-
ınty (New Scandia Township) 2. Syphilis 49, gonorrhea
ɔid 4. Cerebrospinal meningitis 2.

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gonorrhea and chancroid 3, syphilis and chancroid 1, syphilis, gonorrhea and chancroid 1.

Ohio.—Scarlet fever: Sugar Grove (Fairfield County) 7, Lima 11, Cincinnati 19. Smallpox: Yellow Springs (Greene County) 11, Wyoming (Hamilton County) 12, Cleveland 27, Youngstown 15, Middletown 10.

Oregon.—Portland reports 26 cases and 2 deaths from influenza, Columbia City 11 cases and Hood River 41 cases.

Vermont.—No outbreak or unusual prevalence.

Virginia.—Smallpox: Alexandria County 1, Nansemond 1, Portsmouth 6.

Washington.—Unusual prevalence of disease reported. Scarlet fever: Seattle 11, Ellensburg 5, Shelton 13, Tacoma 5, Walla Walla 6. Smallpox: Seattle 14, Walla Walla County 10.

CEREBROSPINAL MENINGITIS.

State Reports for March and April, 1919.

Place.	New cases reported.	Place.	New cases reported.
Indiana (March):		Wisconsin (April):	
Clark County	13	Brown County	1
Hendricks County	1	Jefferson County	1
Marion County	1	Milwaukee County	5
Vanderburg County	4	Polk County	1
Total	19	Shawano County	1
West Virginia (April):		Total	9
Kanawha County	2		
Mercer County	2		
Total	4		

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CEREBROSPINAL MENINGITIS—Continued.

City Reports for Week Ended May 3, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
.....	1	1	New Bedford, Mass.....	.....	1
Md.....	3	2	Newburgh, N. Y.....	.....	1
), Ala.....	.....	1	New Haven, Conn.....	.....	1
s.....	1	1	New Orleans, La.....	1	.....
Conn.....	.....	1	New York, N. Y.....	3	2
Mass.....	1	.....	North Adams, Mass.....	1	1
W. Va.....	.....	1	Philadelphia, Pa.....	1	1
.....	1	1	Piqua, Ohio.....	.....	1
h.....	3	.....	Portland, Oreg.....	.....	1
), Ind.....	.....	1	Racine, Wis.....	.....	1
', Wis.....	.....	1	Riverside, Calif.....	.....	1
'ex.....	.....	1	Trenton, N. J.....	1	.....
y.....	1	1	Troy, N. Y.....	1	.....
s.....	1	.....	Washington, D. C.....	1	.....
nn.....	.....	1	White Plains, N. Y.....	1	.....
Vis.....	2	2	Wilmington, Del.....	1	1
nn.....	.....	1	Worcester, Mass.....	1	.....
.....	1	.....			

CHANCROID.

s Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
anitary district, N. C.....	1	Camp Gordon zone, Ga.....	1
ie School zone, Ga. and Ala.....	1	Camp Travis zone, Tex.....	1

DIPHTHERIA.

Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
zone, Ga.....	1	Camp Jackson zone, S. C.....	1
h district, Miss.....	1	Camp Pike zone, Ark.....	2
Humphreys zone, Va.....	1		

Diphtheria, measles, scarlet fever, and tuberculosis, page 1155.

GONORRHEA.

Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
nitary district, N. C.....	5	Muscle Shoals sanitary district, Ala.....	14
e School zone, Ga. and Ala.....	4	Picric acid plant zone, Ga.....	2
zone, Ga.....	23	Camp Pike zone, Ark.....	11
h district, Miss.....	5	Camp Polk zone, N. C.....	19
umphreys zone, Va.....	3	Camp Sherman zone, Ohio.....	6
zone, S. C.....	25	Camp Travis zone, Tex.....	9
), Va.....	4	Wilmington sanitary district, N. C.....	24

INFLUENZA.

Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
zone, Ga.....	1	Muscle Shoals sanitary district, Ala.....	3
i district, Miss.....	1		

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LEPROSY.

City Reports for Week Ended May 3, 1919.

During the week ended May 3, 1919, one case of leprosy was reported at each of the following-named places: New Orleans, La., New York, N. Y., Philadelphia, Pa., and Portland, Oreg. One death from leprosy was reported at New York, N. Y.

MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
Gas and Flame School zone, Ga. and Ala	1	Muscle Shoals sanitary district, Ala	1
Gulfport health district, Miss	27	Camp Pike zone, Ark	1

Maryland Report for April, 1919.

Place.	New cases reported.	Place.	New cases reported.
Maryland:		Maryland—Continued.	
Baltimore County—		Charles County—Continued.	
St. Dennis	1	Waldorf, R. D	1
Charles County		Baltimore	1
Waldorf	1		
Bolton, R. D	1	Total	5

City Reports for Week Ended May 3, 1919.

Place.	Cases.	Deaths.	Place	Cases	Deaths
Atlanta, Ga	1		Newark, N. J	1	
Birmingham, Ala	2	1	Passaic, N. J	1	
High Point, N. C	1		San Francisco, Calif		1
Little Rock, Ark	1		Wilmington, N. C	1	
Memphis, Tenn	2				

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
Camp Dix zone, N. J	5	Camp Lee zone, Va	1
Fayetteville sanitary district, N. C	1	Camp Merritt zone, N. J	16
Camp Funston zone, Kans	2	Camp Pike zone, Ark	1
Gas and Flame School zone, Ga. and Ala	7	Camp Polk zone, N. C	2
Camp Gordon zone, Ga	13	Camp Upton zone, N. Y	1
Gulfport health district, Miss	2	Wilmington sanitary district, N. C	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1155.

PELLAGRA.

City Reports for Week Ended May 3, 1919.

Place.	Cases.	Deaths.	Place.	Cases	Deaths
Austin, Tex		1	Memphis, Tenn	1	1
Birmingham, Ala	1		Mobile, Ala		1
Charleston, S. C		1	Nashville, Tenn		1
Charlotte, N. C		1	Pine Bluff, Ark	1	
Fort Worth, Tex		1	Raleigh, N. C		1
Houston, Tex		1	Winston-Salem, N. C	1	1

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PLAGUE-INFECTED GROUND SQUIRRELS.

Alameda County, Calif.

plague-infected ground squirrels (*Citellus beechyi*) were
l found April 28 and 29 in different localities in the north-
part of Alameda County, Calif. In both cases diagnosis was
ıpon animal inoculation and cultures. Intensive hunting
)ns are being carried on.

PNEUMONIA.

ɜs Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.
sanitary district, N. C	1
me School zone, Ga. and Ala	2
Humphreys zone, Va	1
:t zone, N. J	1
Muscle Shoals sanitary district, Ala	2
Picric acid plant zone, Ga	3
Camp Pike zone, Ark	1

City Reports for Week Ended May 3, 1919.

ce.	Lobar.		All forms.		Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
	1				Lynn, Mass	1	2		
ıss	1	1			Manitowoc, Wis			3	3
, N. J	1	1			Medford, Mass	2	1		
d	14	9			Methuen, Mass	2			
, La			2		Morgantown, W. Va	3	2		
ex	1				Mount Vernon, N. Y	3			
J	1				Newark, N. J	42	11		
	2				New Bedford, Mass	1			
	42	19			Newburgh, N. Y	2	1		
ss	2	2			New York, N. Y			133	185
	1				Northampton, Mass	1			
ass	1	3			North Attleboro, Mass	1			
	2				Oak Park, Ill	2			
	1	1			Paterson, N. J			9	
			172	63	Philadelphia, Pa	55	32		
io	26	27			Phillipsburg, N. J	2	2		
Md	1	1			Pontiac, Mich	1			
	4	4			Port Chester, N. Y	2	1		
	9	13	11	23	Reno, Nev	3	2		
	9	2			Rochester, N. Y	14	12		
	2	3			Saginaw, Mich	1	3		
	3	1			San Antonio, Tex	3	1		
	4	4			San Diego, Calif			2	2
ıss	4	1			Sandusky, Ohio			2	
ss	4	2			Sanford, Me	1	1		
Mass	1	1			San Francisco, Calif	11	6		
, Mich	7	5			Saratoga Springs, N. Y	1			
is	1	1			Sault Ste. Marie, Mich	1	1		
s	2				Schenectady, N. Y	2	2		
	2	1			Somerville, Mass	7	3		
Mo			1	1	South Bend, Ind	2	2		
Y	6				Spartanburg, S. C	1	1		
ich	4	3			Springfield, Mass	4	3		
ans			7		Toledo, Ohio	3	3		
fo			6	18	Trenton, N. J	1	5		
	1				Watertown, Mass	1			
io	1	1			Westfield, Mass	1			
s	1	2			Winston-Salem, N. C	1	1		
alif	5	1	5	6	Winthrop, Mass	2	1		
	2	4			Worcester, Mass	1	4		

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During the week ended May 3, 1919, one case of rabies in animals was reported at Akron, Ohio, and one at Memphis, Tenn.

RABIES IN MAN.

Austin, Tex., Week Ended May 3, 1919.

One death from rabies was reported at Austin, Tex., during the week ended May 3, 1919.

ROCKY MOUNTAIN SPOTTED OR TICK FEVER.

Missoula, Mont., Week Ended May 3, 1919.

During the week ended May 3, 1919, one fatal case of Rocky Mountain spotted or tick fever was reported at Missoula, Mont.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
Camp Funston zone, Kans	4	Camp Pike zone, Ark	7
Gas and Flame School zone, Ga. and Ala	1	Camp Polk zone, N. C	1
Camp Gordon zone, Ga	2	Camp Sherman zone, Ohio	4
Camp A. A. Humphreys zone, Va	1	Camp Travis zone, Tex	2
Camp Merritt zone, N. J	6		

See also Diphtheria, measles, scarlet fever, and tuberculosis, p. 1155.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
Camp Funston zone, Kans	1	Camp Gordon zone, Ga	29
Gas and Flame School zone, Ga. and Ala	1	Camp Polk zone, N. C	5

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SMALLPOX—Continued.

State Reports for April, 1919—Vaccination histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
re	4				4	
County—						
n	3				3	
undel County—						
hes	6				6	
Haven	7				7	
vell	1				1	
er County—						
ntown	1				1	
keye	2				2	
ridge	2				2	
ck, R. D	1				1	
eorges County—						
r Marlboro	2				2	
on County—						
rstown	10				10	
sville, R. D	4				4	
al	43				43	
County	3				3	
unty	4			2	1	1
County	15		6		8	1
unty	20					20
County	2					2
nty	15				5	10
County	10					10
nty	15		9		4	2
nty	1			1		
ounty	6				6	
County	1				1	
ac County	21		3		14	4
nty	3				3	
e County	7		1		3	3
ounty	2				1	1
ounty	1					1
County	1				1	
County	2				2	
County	4			2	1	1
County	1				1	
County	5				5	
County	39					39
nty	1				1	
County	12		3	1	4	4
unty	2			1	1	
ty	21		4	1	2	14
nty	15		13	2		
ty	7				4	3
ounty	3				3	
ounty	7			7		
nty	8					8
au County	8		8			
County	7				7	
County	1				1	
County	1				1	
County	68				9	59
ity	7		1	1	5	
	346		48	18	97	183

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Rush County	6	Roane County	8
St. Joseph County	11	Summers County	2
Tippecanoe County	8	Wayne County	4
Union County	4	Wood County	6
Vanderburg County	1	Wyoming County	7
Vigo County	2		
Wayne County	1	Total	174
Wells County	2		

City Reports for Week Ended May 3, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Aberdeen, S. Dak	4		Fond du Lac, Wis	1	
Adrian, Mich	3		Fort Wayne, Ind	9	
Atchison, Kans	16		Fort Worth, Tex	5	
Atlanta, Ga	35		Galesburg, Ill	8	
Austin, Tex	1		Grand Forks, N. Dak	1	
Baltimore, Md	1		Great Falls, Mont	1	
Beatrice, Nebr	2		Green Bay, Wis	6	
Bedford, Ind	9		Hibbing, Minn	1	
Beloit, Wis	2		Independence, Mo	4	
Billings, Mont	1		Indianapolis, Ind	11	
Birmingham, Ala	1		Joplin, Mo	1	
Boston, Mass	1		Kalamazoo, Mich	4	
Boulder, Colo	10		Kansas City, Kans	4	
Brunswick, Ga	1		Kansas City, Mo	7	
Burlington, Iowa	1		Knoxville, Tenn	2	
Canton, Ill	1		Kokomo, Ind	16	
Carbondale, Pa	3		La Fayette, Ind	1	
Cedar Rapids, Iowa	13		Leavenworth, Kans	5	
Chanute, Kans	5		Lincoln, Nebr	24	
Charleston, W. Va	1		Logansport, Ind	3	
Charlotte, N. C	1		Long Beach, Calif	5	
Cheyenne, Wyo	2		Los Angeles, Calif	2	
Chicago, Ill	1		Madison, Wis	1	
Chillicothe, Ohio	1		Manitowoc, Wis	2	
Cincinnati, Ohio	5		Marinette, Wis	2	
Cleveland, Ohio	10		Marshalltown, Iowa	12	
Columbia, S. C	2		Middletown, Ohio	1	
Council Bluffs, Iowa	1		Milwaukee, Wis	6	
Davenport, Iowa	13		Minneapolis, Minn	17	
Denver, Colo	12		Mobile, Ala	9	
Detroit, Mich	7		Moline, Ill	1	
Duluth, Minn	3		Muskogee, Okla	3	
Elgin, Ill	1		New Orleans, La	6	
El Paso, Tex	3		New York, N. Y	2	

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[illegible], Ga. and Ala	4	Picric acid plant zone, Ga	3
Gordon zone, Ga	21	Camp Pike zone, Ark	4
llfport health district, Miss	1	Camp Sherman zone, Ohio	1
mp A. A. Humphreys zone, Va	1	Camp Travis zone, Tex	1
amp Jackson zone, S. C	18	Camp Upton zone, N. Y	1
amp Lee zone, Va	5	Wilmington sanitary district, N. C	2
amp Merritt zone, N. J	2		

TETANUS.

City Reports for Week Ended May 3, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Atlantic City, N. J	1	1	Lynchburg, Va		1
Colorado Springs, Colo		1	Newark, N. J	1	
Easthampton, Mass	1	1	Pine Bluff, Ark	1	1
Houston, Tex		1	St. Paul, Minn		1
Los Angeles, Calif	1	1			

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

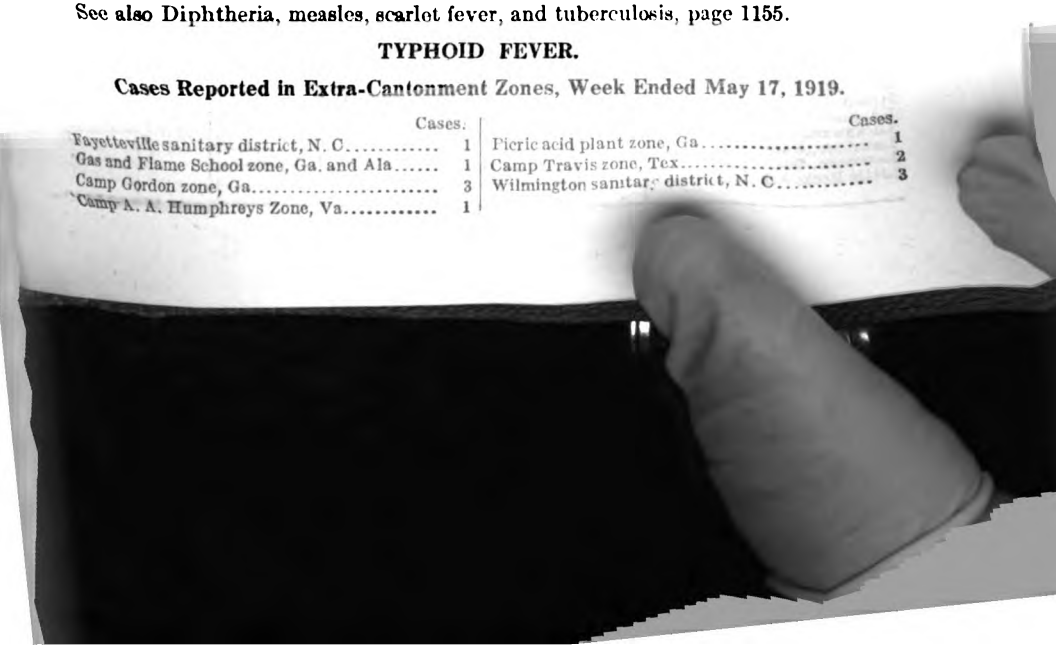
	Cases.		Cases.
Gas and Flame School zone, Ga. and Ala	2	Camp Pike zone, Ark	1
Camp Gordon zone, Ga	6	Camp Polk zone, N. C	6
Camp Lee zone, Va	2	Camp Upton zone, N. Y	2
Camp Merritt zone, N. J	1	Wilmington sanitary district, N. C	3
Picric acid plant zone, Ga	2		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1155.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended May 17, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	1	Picric acid plant zone, Ga	1
Gas and Flame School zone, Ga. and Ala	1	Camp Travis zone, Tex	2
Camp Gordon zone, Ga	3	Wilmington sanitary district, N. C	3
Camp A. A. Humphreys Zone, Va	1		



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Baltimore County—	
Lansdowne	1
Carroll County—	
New Windsor	2
Lineboro, R. D	1
Cecil County—	
Elk Mills	1
Charles County—	
White Plains, R. D	1
Bolton	1
Frederick County—	
Brunswick	1
Burkittsville, R. D	1
Garrett County—	
Kitzmiller	1
Putnam County	2
Total	21
Wisconsin (April):	
Douglas County	4
Milwaukee County	3
Price County	1
Racine County	2
Rock County	1
Winnebago County	2
Total	13

City Reports for Week Ended May 3, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md	6		Los Angeles, Calif	1	
Bedford, Ind	1		McKeesport, Pa	1	
Boston, Mass	1		Macon, Ga	1	
Bridgeport, Conn	1		Mankato, Minn	1	
Buffalo, N. Y	1		Memphis, Tenn	3	2
Charleston, S. C	1		Nashville, Tenn		1
Charleston, W. Va	1		New Bedford, Mass	1	
Chicago, Ill	2		New Haven, Conn	1	
Cincinnati, Ohio	1		New Orleans, La	3	2
Concord, N. H	1		New York, N. Y	4	1
Detroit, Mich	2	1	Norfolk, Va	1	
Duluth, Minn	1		Oshkosh, Wis	2	
Durham, N. C	1		Passaic, N. J	1	
East Chicago, Ind		2	Philadelphia, Pa	17	1
Elizabeth, N. J	1		Portland, Me	1	
Eureka, Calif	1	1	St. Louis, Mo	2	
Everett, Mass	1	1	St. Paul, Minn	2	1
Fairmont, W. Va	1		San Antonio, Tex	2	1
Highland Park, Mich	1		San Francisco, Calif	4	
Homestead, Pa	3		Superior, Wis	2	
Indianapolis, Ind	1		Toledo, Ohio	1	
Ironwood, Mich		1	Tulsa, Okla	2	
Ithaca, N. Y	1		Washington, D. C	1	
Kansas City, Mo	1		Wheeling, W. Va	1	
Lackawanna, N. Y	2		Wilmington, Del	1	
Lawrence, Kans	2		Wilmington, N. C	2	1
Lawrence, Mass	2		Winston-Salem, N. C	1	
Little Rock, Ark	1				

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City Reports for Week Ended May 3, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census. Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Aberdeen, S. Dak	15,926				2		1			1
Adams, Mass	14,406	3								
Adrian, Mich	11,570	5			40		6			
Akron, Ohio	93,604	38	1		6					
Alameda, Calif	28,433	5	2		39		1			
Allentown, Pa	65,109		2				2			
Alton, Ill	23,783									
Altoona, Pa	59,712		1							
Anderson, Ind	24,230	8							1	1
Ann Arbor, Mich	15,041	12	1		1				1	
Ansonia, Conn	16,954	4			1					
Appleton, Wis	18,005	6					1			
Arlington, Mass	13,073	9	1						1	
Asbury Park, N. J	14,629	2			2		2			
Ashtabula, Ohio	22,008	2					4			
Atchison, Kans	16,785						7		6	5
Atlanta, Ga	196,144	58			8				3	
Atlantic City, N. J	59,515	12			6					
Attleboro, Mass	19,776	2					1			1
Austin, Tex	35,612	10					3			
Bakersfield, Calif	17,543	4					174	1	29	21
Baltimore, Md	594,637	223	28	4	24		1			
Bangor, Me	26,958								2	1
Barre, Vt	12,401	1			1					
Baton Rouge, La	17,544	6			6		2		1	
Battle Creek, Mich	30,159		5		1		1			
Bayonne, N. J	72,204		6							2
Beatrice, Nebr	10,437	2								
Beaumont, Tex	28,851	10			2					
Beaver Falls, Pa	13,749									
Bedford, Ind	10,613	2								
Bellaire, Ohio	14,575	5			3		1			
Belleville, N. J	12,797		2				7		1	
Beloit, Wis	18,547	3			1				1	
Benton Harbor, Mich	11,099	4			2		1			
Berkeley, Calif	60,427	11	2							
Berlin, N. H	13,892	3							4	
Bethlehem, Pa	14,353		3		17		1		3	
Beverly, Mass	22,128	5								
Biddeford, Me	17,760	3					4			
Billings, Mont	15,123		1	1	1					1
Binghamton, N. Y	54,864	10	1						9	3
Birmingham, Ala	189,716	54			4		1			1
Bloomfield, N. J	19,013	1	2		1		4			
Boise, Idaho	35,951	4			1		42	1	74	32
Boston, Mass	767,813	259	31	3	15				1	
Braddock, Pa	22,060		3							

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Cairo, Ill										
Cambridge, Mass	114,293	26	3		13		5		4	5
Camden, N. J	108,117		3				4		2	
Canton, Ill	13,674	6								1
Canton, Ohio	62,566	15	1		20		2			
Carlisle, Pa	10,795				31					
Cedar Rapids, Iowa	38,033						1			
Chanute, Kans	12,968	3			5					
Charleston, S. C	61,041	25	1							4
Charleston, W. Va	31,060	17	2		6		2			3
Charlotte, N. C	40,759		1		6				1	1
Chelsea, Mass	48,405	13					2		3	1
Chester, Pa	41,857				4					
Cheyenne, Wyo	[1] 11,320				9					
Chicago, Ill	2,547,201	695	122	17	1,056	10	53	2	313	88
Chicopee, Mass	29,950	13	1				3		4	3
Chillicothe, Ohio	15,625		1						1	
Cincinnati, Ohio	414,248	124	5	1	38		39		23	25
Cleveland, Ohio	692,259	212	17	3	32	1	15		41	23
Clinton, Mass	[1] 13,075	4					3			1
Coatesville, Pa	14,998				5					
Coffeyville, Kans	18,331				1		1			
Colorado Springs, Colo	38,965	18					1		1	
Columbia, S. C	35,165				1				1	
Columbus, Ohio	220,135	71	4		15		2		7	6
Concord, N. H	22,858	11			1					1
Corpus Christi, Tex	10,789	1		1						
Council Bluffs, Iowa	31,838	6	1							
Covington, Ky	59,623	15	1				2		1	2
Cranston, R. I	26,773	5					2		1	1
Cumberland, Md	26,686	12	2		17		1			1
Danbury, Conn	22,931	5								
Danville, Va	20,183	7								
Davenport, Iowa	49,618		1							
Dayton, Ohio	128,939	37	3	1	1		1		3	
Decatur, Ill	41,483	8	2		1				7	1
Dedham, Mass	10,618	1								
Denver, Colo	268,439	53	8		1		11			12
Des Moines, Iowa	104,052		4				14			
Detroit, Mich	619,648	205	63	5	51	1	62	1	64	21
Dover, N. H	13,276	4								
Du Bois, Pa	14,994						4		1	
Dubuque, Iowa	40,096		1							
Duluth, Minn	97,077	13	5		36		2		4	3
Dunmore, Pa	21,286		2							
Durham, N. C	26,160	1			2					
East Chicago, Ind	30,286	4								
East Cleveland, Ohio	13,864						2			
Easthampton, Mass	10,656	3	3	1						1
Easton, Pa	30,854		1							
East Orange, N. J	43,761	8			1		6		1	
Eau Claire, Wis	18,887				8		3			
Elgin, Ill	28,562	5	2		1					
Elizabeth, N. J	88,830		6		3		15		8	2
Elmira, N. Y	38,272	13			2		3		3	1
El Paso, Tex	69,149	31	1							7
Englewood, N. J	12,603	3								
Eureka, Cal	15,142	4			1		1			
Evanston, Ill	29,304	11	1		127					

[1] Population Apr. 15, 1910.

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Frederick, Md.	11,225	8					1			
Freeport, Ill.	19,844	5								
Fremont, Ohio	11,034	3			1				1	1
Fresno, Calif.	36,314	6								
Galesburg, Ill.	24,629	14				5				
Galveston, Tex.	42,650	12					1	1		1
Grand Forks, N. Dak.	16,342	4					1			
Grand Rapids, Mich.	132,861	42	8	2	18		1		4	
Great Falls, Mont.	[1] 13,948	10	1		2		5		1	
Green Bay, Wis.	30,017	14	3						1	
Greenfield, Mass.	12,251	3	3				2		2	1
Greensboro, N. C.	20,171	7								
Greensburg, Pa.	15,881				22		3			
Greenville, S. C.	18,574	3			1				1	
Hackensack, N. J.	17,412	10	2							
Harrisburg, Pa.	73,276				84		7			
Harrison, N. J.	17,345		1				3			
Hartford, Conn.	112,831	45	2		7		4		5	4
Haverhill, Mass.	49,180	16	3		2		2		2	3
Hazleton, Pa.	28,981						2			
Hibbing, Minn.	17,550						1			
Highland Park, Mich.	33,859	7	13				1			
High Point, N. C.	13,439	1	1		4				1	
Hoboken, N. J.	78,324	18	4		1				1	
Holland, Mich.	12,459	2								
Holyoke, Mass.	66,503	13					8		4	2
Homestead, Pa.	23,071		1				2		1	
Houston, Tex.	116,878	38	1		2					5
Hudson, N. Y.	12,898	1								
Independence, Mo.	11,964	6			8					
Indianapolis, Ind.	283,622	88	5	1	59		25		13	10
Ironwood, Mich.	15,095	4			1					
Ithaca, N. Y.	16,017	7	1		2		10		1	1
Jamestown, N. Y.	37,431	10	1		2		3		2	
Janesville, Wis.	14,411	2								
Jersey City, N. J.	312,557		20		13		5		22	
Johnstown, N. Y.	10,678	1								
Johnstown, Pa.	70,473		2				1		3	
Joplin, Mo.	33,400								2	
Kalamazoo, Mich.	50,408	20			8		4		3	1
Kankakee, Ill.	14,270	1								
Kansas City, Kans.	102,096		5		7		3			
Kansas City, Mo.	305,816	99	4	1	34	2	2			9
Kearny, N. J.	24,325	3	3	1			3			
Keene, N. H.	10,725	4								
Kenosha, Wis.	32,833	4	2		17		6			
Knoxville, Tenn.	59,112		4	1	4		3		1	1
Kokomo, Ind.	21,929	14			1		4			
Lackawanna, N. Y.	16,219	2	1		13					
La Crosse, Wis.	31,833	10	1							2
La Fayette, Ind.	21,481	1					3			
Lakewood, Ohio	23,813	9	1						1	1
Lancaster, Ohio	16,086	6			3		3			1
Lancaster, Pa.	51,437				7		3			
Lawrence, Kans.	13,477	1								
Lawrence, Mass.	102,923	22	3				2		4	7
Leavenworth, Kans.	[1] 19,363		2	1						
Leominster, Mass.	21,365	4	1		4		1		2	

[1] Population Apr. 15, 1910.

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								1		1	
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					1			1		1	
			10		6			10	1	34	21
			5		7			13		3	6
			10		3			10	1	6	2
			8	1	14			7		2	2
								4			
					1					2	
			5		15			1			
					1						
			10		4			5			1
	15,859		5		1			2			
Manchester, N. H.	79,607		14	2	2			1		17	
Manitowoc, Wis.	13,931		3								
Mankato, Minn.	[1] 10,365		2								1
Marinette, Wis.	[1] 14,610		2								
Marion, Ind.	19,923		11	3				9			1
Marion, Ohio.	24,129							2			
Marlboro, Mass.	15,285		3							1	
Marshalltown, Iowa.	14,519							1			
Martinsburg, W. Va.	12,984				1			2			
Martins Ferry, Ohio.	10,135							1		2	
Mason City, Iowa.	14,938		7								1
Meadville, Pa.	13,968									1	
Medford, Mass.	26,681		8								
Melrose, Mass.	17,724		2					2			
Memphis, Tenn.	151,877			6		35		6		9	4
Meriden, Conn.	29,431					2		5		6	4
Methuen, Mass.	14,320		3	1				2			
Middletown, N. Y.	15,890									2	
Middletown, Ohio.	16,384		4								
Milford, Mass.	14,280		4								
Milwaukee, Wis.	445,008		123	8		7		25	2	27	5
Minneapolis, Minn.	373,448			21	1	35	1	25		13	12
Missoula, Mont.	19,075		5					1		1	
Mobile, Ala.	59,201		22			1				1	
Moline, Ill.	27,976		2	3	1	1					1
Monessen, Pa.	23,070			1				1			
Montclair, N. J.	27,087					2		2			
Montgomery, Ala.	44,039		15			5		3			
Morgantown, W. Va.	14,444		3								
Morristown, N. J.	13,410		6								
Mount Carmel, Pa.	20,709			2		6		1		1	
Mount Vernon, N. Y.	37,991		5					2		1	1
Muscatine, Iowa.	17,713			1							
Nanticoke, Pa.	23,811			1		1		1			
Nashua, N. H.	27,541		6								1
Nashville, Tenn.	118,136		50	1		27		7		7	4
Natick, Mass.	10,140		5	1						3	
Newark, N. J.	418,789		98	31		4		27		33	14
New Bedford, Mass.	121,622		30	2		12		6		15	5
New Britain, Conn.	55,385		13	1		9		4		6	2
New Brunswick, N. J.	25,855					14		1			
Newburgh, N. Y.	29,893		11	1							
Newburyport, Mass.	15,291		6								1
New Haven, Conn.	152,275		30	7		5		1	1	5	1
New London, Conn.	21,199			2		1				3	1
New Orleans, La.	377,010		120	5		7		13		29	22
Newport, Ky.	32,133		5					2	1	1	1
Newport, R. I.	30,585		6	1							1
Newton, Mass.	44,345		6	3		4		3			
New York, N. Y.	5,737,492		1,456	292	28	153	5	116	2	166	171

[1] Population Apr. 15, 1910.

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Paterson, N. J.	140,512		3		5		1			
Peekskill, N. Y.	19,034	5								
Pekin, Ill.	10,973		2		3		1			
Peoria, Ill.	72,184	16	2				1			
Perth Amboy, N. J.	42,646	4							4	
Philadelphia, Pa.	1,735,514	472	79	4	137		78	2	127	79
Phillipsburg, N. J.	15,879	6								
Phoenixville, Pa.	11,871				7					
Piqua, Ohio	14,275	4								
Pittsburgh, Pa.	586,196		10		16		6		9	
Pittsfield, Mass.	39,678	12	1						2	
Plainfield, N. J.	24,330	4	1				2		4	
Plymouth, Mass.	14,001	2								
Plymouth, Pa.	19,439				6				1	
Pomona, Calif.	13,624	1								
Pontiac, Mich.	18,006	5	6							1
Port Chester, N. Y.	16,727	6	1				1			
Portland, Me.	64,720	21					9			1
Portland, Oreg.	308,399	68	2		2		10		16	4
Portsmouth, N. H.	11,730				1					
Portsmouth, Va.	40,693	16			1				2	2
Pottsville, Pa.	22,717				3				1	
Providence, R. I.	259,895	71	14	2	1		8			6
Pueblo, Colo.	56,084						1			
Quincy, Ill.	36,832	11								1
Quincy, Mass.	39,022	5	3				5		1	1
Racine, Wis.	47,465	9							3	1
Rahway, N. J.	10,361	4								
Raleigh, N. C.	20,274	12								1
Reading, Pa.	111,607		5		14		1			
Redlands, Calif.	14,573						1		1	
Reno, Nev.	15,514	5								
Richmond, Va.	158,702	47	3		37		3		5	7
Riverside, Calif.	20,496	4								2
Roanoke, Va.	46,282	20	2		23		3			
Rochester, N. Y.	264,714	76	4		9		16		4	5
Rockford, Ill.	56,739	19	2		20		5		3	1
Rock Island, Ill.	29,452		3		1					
Rocky Mount, N. C.	12,673	6			1					
Sacramento, Calif.	68,984	26					2		4	5
Saginaw, Mich.	56,469	14					2		3	
St. Cloud, Minn.	12,013				11		1		1	
St. Joseph, Mo.	86,498	33	4				3		1	2
St. Louis, Mo.	768,630	185	66	4	85	1	22		42	17
St. Paul, Minn.	252,465	78	26	1	79	1	12		19	11
Salem, Mass.	49,346		9				5		5	
Salem, Oreg.	21,274	9								2
Salt Lake City, Utah	121,623	32	2				2			3
San Angelo, Tex.	10,321	6								1

[1]Population Apr. 15, 1910.

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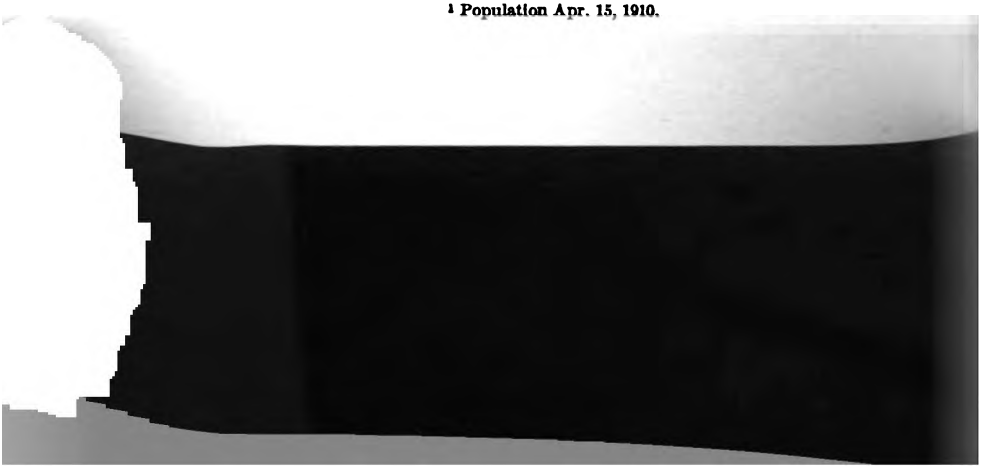
Southbridge, Mass.	[illegible]	2								
Spartanburg, S. C.	21,985	7	1							
Springfield, Ill.	62,623		3							1
Springfield, Mass.	108,668	26	2				3		6	1
Springfield, Ohio.	52,296				33				2	2
Steelton, Pa.	15,759		4		27				1	
Steubenville, Ohio.	28,259	10							1	
Stillwater, Minn.	[1] 10,198		1							
Stockton, Cal.	36,209	10	2							
Streator, Ill.	14,313	5								
Superior, Wis.	47,167	3			1		3			
Syracuse, N. Y.	158,559	56	2		4		9		6	2
Taunton, Mass.	36,610	15	1		15	1	1		2	1
Terre Haute, Ind.	67,361	18			2		1		1	1
Tiffin, Ohio.	12,962	3								
Toledo, Ohio.	202,010	69	5	1	39		11	1	2	1
Topeka, Kans.	49,538	15							3	2
Trenton, N. J.	113,974	35	1	1	45	1			6	2
Troy, N. Y.	78,094	23	14	1			4		5	2
Vallejo, Calif.	13,803	4								1
Virginia, Minn.	15,954		4							
Waltham, Mass.	31,011	9	3	1			2			
Warren, Pa.	15,083				1					
Washington, D. C.	369,282		24	1	12	1	10		20	1
Washington, Pa.	22,076		1							
Waterbury, Conn.	89,201	3	5		16		12		3	1
Watertown, Mass.	15,188	2					3			
Watertown, N. Y.	30,404	9	1		1		1			
Wausau, Wis.	19,666	8					1			1
West Chester, Pa.	13,403						3			
Westfield, Mass.	18,769	7	2				2		1	1
West Hoboken, N. J.	44,386	5	2		1				1	
West New York, N. J.	19,613	2	2				2	1		
West Orange, N. J.	13,964	2			1		1			
Weymouth, Mass.	14,041	4								
Wheeling, W. Va.	43,657	14			1		1		1	1
White Plains, N. Y.	23,331	6	3				2			
Wichita, Kans.	73,597	15							3	1
Wilkes-Barre, Pa.	78,334		1		35				1	
Williamsport, Pa.	34,123		3		8		5			
Wilmington, Del.	95,369	26	1	1			1			1
Wilmington, N. C.	30,400	12	6	1						1
Winchester, Mass.	10,812	4					1			
Winston-Salem, N. C.	33,136	14	1		28	1	1		1	1
Winthrop, Mass.	13,105	1					3			
Woburn, Mass.	16,076	7								
Worcester, Mass.	166,106	65			37	1	5		6	5
Yonkers, N. Y.	103,066	12	3		9		3		8	2
York, Pa.	52,770		2		1		6			
Youngstown, Ohio.	112,282	37	5	2	61		4	1	4	1
Zanesville, Ohio.	31,320	11								1

[1] Population Apr. 15, 1910.



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Diseases.	Apr. 11-20, 1919.		Remaining under treatment Apr. 20, 1919.	Diseases.	Apr. 11-20, 1919.		Remaining under treatment Apr. 20, 1919.
	New cases.	Deaths.			New cases.	Deaths.	
Broncho-pneumonia	1	.....	(1)	Malaria	21	.....	[2] 25
Diphtheria	5	.....	.....	Paratyphoid fever	2	.....	5
Influenza	6	4	[1] 3	Typhoid fever	18	1	[3] 66
Leprosy	.....	.....	17	Varicella	5	.....	5

[1] Excluding those remaining in hospital. [2] From the interior 22. [3] From the interior 27.

RUSSIA.

Typhus Fever—Archangel.

During the period from March 1 to 15, 1919, typhus fever was reported prevalent at Archangel, Russia, with 36 cases and 18 fatalities.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended May 23, 1919.[1]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Calcutta	Mar. 16–22	.....	76	
Madras	Mar. 23–29	4	3	
Indo-China:				
Cochin China—				
Saigon	Mar. 17–23	128	72	City and vicinity.
Java:				
East Java	.....	.....	.....	Feb. 5–Mar. 11, 1919: Cases, 458; deaths, 541.
Surabaya	Feb. 5–Mar. 11	248	196	
Philippine Islands:				
Manila	Apr. 6–12	4	1	
Provinces	.....	.....	.....	Apr. 6–12, 1919: Cases, 53; deaths, 37.
Batangas	Apr. 6–12	5	2	
Bohol	do	10	6	
Iloilo	do	2	1	
Laguna	do	7	6	
Pampanga	do	28	21	
Pangasinan	do	1	1	

[1] From medical officers of the Public Health Service, American consuls, and other sources.

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SMALLPOX.

Canada:				
Nova Scotia—				
Cape Sable Island	May 13			Present on south side.
Halifax	Apr. 27–May 3	25		
Quebec—				
Quebec	Apr. 28–May 3	1		
China:				
Nanking	Apr. 5–11			Present.
Chosen (Korea):				
Chemulpo	Feb. 1–28	9	5	
Fusan	do	5		
Seoul	do	1		
Denmark:				
Copenhagen	Feb. 9–Mar. 15	54		
Egypt:				
Alexandria	Mar. 2–8	3	1	
France:				
Paris	Apr. 6–12	6	1	
Great Britain:				
London	Apr. 13–19	2		
India:				
Calcutta	Mar. 16–22		56	
Madras	Mar. 23–29	56	21	
Indo-China:				
Cochin-China—				
Saigon	Mar. 17–23	29	4	City and vicinity.
Italy:				
Messina	do	1		
Java:				
East Java				Feb. 19–25, 1919: Cases, 1.
Surabaya	Feb. 19–25	1		
Mesopotamia:				
Bagdad	Jan. 11–Feb. 7	5		
Mexico:				
Guadalajara	Mar. 1–31	1		
Newfoundland:				
St. Johns	Apr. 27–May 2	3		Outports, 27 cases.
Philippine Islands:				
Manila	Apr. 6–12	3	1	
Portugal:				
Oporto	Mar. 28–Apr. 12	42	29	
Spain:				
Barcelona	Mar. 12–Apr. 9		2	
Cadiz	Feb. 1–28		9	
Seville	do		1	
Valencia	Mar. 9–15	55	2	

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Archangel	Mar. 1-15	36		

YELLOW FEVER.

Brazil:				
Bahia	Jan. 26-Mar. 1	3	2	

Reports Received from Dec. 28, 1918, to May 16, 1919.

CHOLERA.

Ceylon:				
Colombo	Nov. 17-30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13-19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18-Dec. 28	1,351	1,031	
Do	Dec. 29-Mar. 8	9,681	8,503	
Calcutta	Sept. 20-Dec. 21		241	Report for Nov. 23, 1918, missing.
Do	Dec. 29-Mar. 8		869	
Karachi	Jan. 26-Mar. 22	3	3	
Madras	Oct. 5-Dec. 28	264	164	Oct. 27-Nov. 2, 1918: Cases, 9; deaths, 4.
Do	Jan. 5-Mar. 8	426	296	
Rangoon	Oct. 5-Dec. 21	35	35	
Do	Dec. 29-Feb. 22	15	11	
Indo-China				July 1-Oct. 31, 1918: Cases, 753; deaths, 472.
Anam	July 1-Aug. 31	37	30	
Cambodia	July 1-Oct. 31	324	171	
Cochin China	do	436	337	
Saigon	Oct. 7-Dec. 22	75	45	
Do	Dec. 3-Mar. 9	328	195	
Kwang-Chow-Wan	July 1-31	50	34	
Tonkin	July 1-Oct. 31	6		
Java:				
East Java				Oct. 7-Dec. 31, 1918: Cases, 381; deaths, 323. Jan. 1-28, 1919: Cases, 291; deaths, 176.
Surabaya district	Oct. 7-Dec. 31	655	423	
Do	Jan. 1-28	133	84	
Mid-Java				Sept. 25-Dec. 18, 1919: Cases, 3,282; deaths, 2,014. Jan. 24-Feb. 20, 1919: Cases, 1,183; deaths, 928.
Samarang	Sept. 26-Oct. 16	120	111	
West Java				Oct. 3-Dec. 11, 1918: Cases, 412; deaths, 238. Dec. 27, 1918-Jan. 23, 1919: Cases, 10; deaths, 3.
Batavia	Oct. 3-Dec. 11	291	148	
Do	Dec. 27-Jan. 23	8	2	
Cheribon	Jan. 3-9	1		
Mesopotamia:				
Bagdad	Oct. 11-18	8		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 16, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks
Philippine Islands:				
Manila	Sept. 22-Dec. 28	209	135	
Do	Dec. 29-Mar. 29	25	13	
Provinces				Nov. 2-Dec. 28, 1918, Cases, [illegible] deaths, 1,513. [illegible] Mar. 29, 1919, Cases, [illegible] deaths, 917.
Albay	Dec. 15-21	1	1	
Ambos Camarines	Feb. 15-21	10	2	
Bataan	Nov. 17-Dec. 28	38	32	
Batangas	Nov. 2-Dec. 28	258	230	
Do	Dec. 29-Mar. 29	71	55	
Bohol	Nov. 2-Dec. 28	29	24	
Do	Dec. 29-Mar. 29	88	55	
Bulacan	Oct. 12-Dec. 28	51	8	
Do	Dec. 29-Feb. 21	42	26	
Capiz	Dec. 22-28	7	5	
Do	Jan. 5-25	28	14	
Cavite	Oct. 27-Dec. 21	207	113	
Do	Dec. 29-Jan. 25	17	16	
Cebu	Nov. 10-Dec. 21	50	27	
Do	Jan. 12-18	13	12	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 15	56	38	
Iloilo	Oct. 27-Dec. 21	112	78	
Do	Jan. 5-Mar. 29	186	118	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Mar. 29	142	99	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 21-30	7	14	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-Mar. 29	194	88	
Nueva Ecija	Jan. 12-25	9	6	
Occidental Negros	Feb. 2-Mar. 21	8	5	
Oriental Negros	Nov. 2-Dec. 7	32	18	
Do	Jan. 5-Feb. 8	35	22	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Mar. 29	51	38	
Pangasinan	Nov. 2-Dec. 28	930	652	
Do	Dec. 29-Mar. 29	167	129	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-Feb. 8	44	36	
Tayabas	Nov. 2-Dec. 28	64	31	
Do	Nov. 10-Dec. 28	54	25	
Do	Dec. 29-Feb. 15	69	62	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-Feb. 8	25	21	
Poland:				
Plonsk district	Oct. 2-Nov. 27	5		
Warsaw	Sept. 29-Oct. 26	5	1	
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals Aug. 21, 1918, Cases, [illegible] deaths, 783. In [illegible] hospitals, Oct. 1, 1918, Cases [illegible]
Ukrania—				
Ekaterinaslav	Sept. 1-20	7	6	
Odessa	...do	25		Sept. 1-20, 1918; 11 cases at [illegible] Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
Do	Feb. 9-Mar. 15	12	9	
China:				
Amoy	Nov. 24-Dec. 8			Present.
Chungking	Dec. 1-7			Do.
Hing Ning district	Mar. 15			Do.
Hongkong	Oct. 1-Dec. 28	4	4	
Do	Jan. 1-Mar. 15	18	15	

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Do	Jan. 12–Mar. 8		43	
Karachi	Oct. 19–Dec. 28	17	17	
Do	Dec. 29–Mar. 22	18	16	
Madras	Dec. 8–28	26	17	
Do	Dec. 29–Mar. 8	131	61	
Madras Presidency	Oct. 13–Dec. 28	1,152	774	Oct. 27–Nov. 2, 1918: Cases, 142; deaths, 38.
Do	Dec. 29–Mar. 8	2,562	1,726	
Rangoon	Oct. 5–Dec. 21	84	81	
Do	Dec. 29–Feb. 22	107	100	
Indo-China				July 1–Oct. 31, 1918: Cases, 161; deaths, 145.
Anam	July 1–Oct. 31	42	36	
Cambodia	do	72	72	
Cochin-China	do	65	35	
Saigon	Oct. 7–Nov. 24	5	1	
Do	Jan. 13–Mar. 9	10	8	
Kwang-Chow-Wan	July 1–31	1	1	
Java:				
East Java				Oct. 7–Nov. 18, 1918: Cases, 109; deaths, 109. Jan. 1–14, 1919: Cases, 69; deaths, 69.
Surabaya (district)	Oct. 7–Dec. 31	92	92	
Do	Jan. 1–14	34	34	
Mid-Java				Sept. 25–Oct. 16, 1918: Cases, 14; deaths, 14. Jan. 30–Feb. 11, 1919: Cases, 110; deaths, 110.
Samarang	Sept. 25–Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16–29	5	2	
Do	Feb. 22–28	6	4	
Siam:				
Bangkok	Sept. 21–Oct. 12	6	5	
Do	Jan. 19–Feb. 22	7	6	
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.

SMALLPOX.

Algeria:				
Algiers	Oct. 1–Dec. 31	2	1	
Austria				Dec. 1, 1918–Jan. 11, 1919: Cases, 68. Jan. 12–Feb. 8, 1919: Cases, 57.
Vienna	Dec. 1–Jan. 11	6		
Bohemia				Feb. 1919: Reported prevalent.
Gablonz	Mar. 1–31	26		March, 1919: Cases, 57.
Brazil:				
Rio de Janeiro	Dec. 1–28	46	19	Oct. 6–12, 1918: Cases, 15; deaths 10.
Do	Dec. 30–Jan. 25	25	11	
Sao Paulo	Mar. 3–9		1	
British East Africa:				
Mombasa	Sept. 1–Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22–28	1		
Do	Jan. 5–18	2		
St. John	Nov. 8–14	3		
Do	Jan. 26–Feb. 22	6		

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Frenchmans Cove	Feb. 1–7	1		
Humbermouth	Mar. 15–21			Present.
Kings Cove	Jan. 18–Mar. 14	2		
Little Paradise	Feb. 9–14	1		
McIvers	Feb. 1–7	15		
Merasheen	do			Present.
Mercers Cove	Feb. 9–14	1		
Middle Arm	Feb. 1–7	40		Bay of Islands.
Mortons Harbor	Mar. 8–14	1		
Musgrove Harbor	Dec. 7–13	4		
Do	Jan. 11–17	6		Feb. 7, 1919: Present.
Paradise	Dec. 7–13	30		Placentia Bay.
Petitforte	Feb. 15–21	1		
Saddle Hill	do	1		Harbor Grace.
Springdale	Feb. 1–Mar. 7	7		
St. Georges	Feb. 1–Mar. 28	32		Other outports, Mar. 29–Apr. 11, 1919: 14 cases.
St. Jacques	Jan. 18–24	2		
Panama				Aug. 1–31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1–25, 1919: Cases, 28.
Colon	Dec. 15–21	1		
Do	Dec. 29–Feb. 9	8		
Philippine Islands:				
Manila	Nov. 2–16	5	3	
Do	Dec. 29–Mar. 29	37	20	Varioloid, 16.
Portugal:				
Lisbon	Nov. 16–Dec. 28	843		
Oporto	Mar. 9–23	43	22	
Portuguese East Africa:				
Lourenco Marques				July 1–Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1–3	4		
Do	Jan. 17–23		1	
Do	Feb. 1–Mar. 15	16	1	
Spain:				
Barcelona	Jan. 9–Feb. 11		5	
Do	Feb. 19–Mar. 11	2		
Bilbao	Jan. 1–Feb. 20	6		
Cadiz	Oct. 1–Dec. 31	18		
Do	Jan. 1–31		17	
Madrid	Sept. 1–Oct. 31	153		
Do	Jan. 1–Feb. 28		74	
Seville	Nov. 1–Dec. 31		8	
Do	Jan. 1–31		3	
Valencia	Nov. 10–Dec. 21	40	9	
Do	Dec. 29–Jan. 25	93	10	
Do	Feb. 16–Mar. 8	160	17	
Straits Settlements:				
Penang	Oct. 6–12	1		
Singapore	Feb. 2–22	3		
Sweden:				
Stockholm	Feb. 2–8		1	
Union of South Africa:				
Cape Town	Aug. 1–30	1		
Do	Dec. 21–Jan. 31	1		
Johannesburg	Aug. 1–Oct. 31	12		Nov. 1–30, 1918: Cases, 4.

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Netherlands:				
Amsterdam	Dec. 8–14	1		
Do	Jan. 12–18	4		
Delft	Feb. 26			Present.
Harlem	do			Do.
Leiden	do			Do.
Limburg	do	5	1	Mining district.
Rotterdam	Feb. 2–Mar. 22	493	87	Jan. 30–Feb. 27, 1919: Cases, 462; deaths, 46.
Schiedam	Feb. 26			Present. Sept. 29–Oct. 26, 1918: Cases, 572; deaths, 50.
Poland:				
Lodz	Sept. 29–Oct. 26	55	8	
Warsaw	do	111	13	
Portugal:				
Braga	Mar. 24			
Oporto	Mar. 8–15	184		
Russia:				
Archangel	Jan. 15–Mar. 1	197	43	
Ukarine				Apr. 5, 1919: Reported to be spreading.
Serbia				Do.
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1–Dec. 30	43		
Do	Jan. 17–Mar. 15	143	15	
Spain:				
Huelva	Oct. 1–31		2	
Madrid	Dec. 1–31		1	
Union of South Africa:				
Port Elizabeth	Sept. 14–28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Bahia	Jan. 12–18	2		
Pernambuco	Oct. 1–Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29–Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1–30	1		
Do	Mar. 1–15	1		
Catarama	Feb. 1–15	1		
Chobo	Jan. 1–15	1		
Daule	do	1	1	
Duran	Nov. 1–Dec. 31	3	2	
Do	Jan. 16–Mar. 15	5	1	
Guayaquil	July 1–Dec. 31	326	177	
Do	Jan. 1–Mar. 31	124	68	
Hacienda Vainilla	Feb. 16–28	1		
Milagro	Nov. 1–15	1		
Do	Feb. 1–Mar. 15	2	1	
Naranjal	Nov. 1–15	1	1	
Do	Jan. 1–15	1	1	
Naranjito	Nov. 1–15	1	1	
Do	Jan. 1–Feb. 28	2	2	
Payo (Hacienda)	Nov. 1–15	1		
Punta de Piedra	Nov. 1–30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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evident that in almost every instance where the two series can be compared the Prudential ratios are from 25 to 50 per cent higher than those for the registration area.

TABLE I.—*Ratios, in per cent, of tuberculosis deaths to total deaths in occupations exposed to mineral and metallic dusts.*[1]

Occupation.	United States registration area.						Prudential experience.					
	Ages.						Ages.					
	15–24	25–34	35–44	45–54	55–64	15 and over.	15–24	25–34	35–44	45–54	55–64	15 and over.
All occupied males	28.1	39.9	24.0	14.4	7.6	14.9	33.2	40.9	32.9	19.0	8.8	23.5
Brick, tile, and terra cotta workers							22.9	35.3	19.8	18.6	10.7	15.6
Iron and steel workers	19.8	26.1	23.3	16.7	8.5	16.9	30.0	34.1	31.3	14.7	8.7	21.0
Plasterers	25.0	31.5	34.5	16.4	7.8	16.7	34.5	43.6	40.4	23.5	11.8	21.9
Molders							23.7	40.4	30.7	21.6	13.9	23.0
Paper hangers							35.1	44.0	42.5	15.7	11.5	26.1
Painters, glaziers, and varnishers	30.8	36.9	29.2	17.4	9.0	18.7						
Tinplate and tinware workers	39.4	36.7	34.8	13.7	6.6	18.7						
Jewelers	50.0	39.7	23.4	14.1	8.5	17.8	50.9	58.3	45.3	21.2	11.1	29.5
Glassblowers							45.1	53.3	31.3	23.3	15.4	32.1
Other glassworkers							31.5	51.1	34.4	23.1	15.5	30.5
Glassworkers	47.2	42.6	33.1	19.7	7.9	30.0						
Tool and instrument makers							37.5	52.7	36.9	33.7	10.4	31.9
Potters							31.2	49.6	39.8	30.2	21.1	32.2
Marble and stone cutters	26.2	43.5	44.1	41.6	23.3	30.7	38.3	53.1	44.4	39.0	26.7	33.8
Brass workers							58.2	51.0	43.8	24.2	16.1	38.7
Compositors and type setters							46.3	55.9	41.1	24.9	9.9	28.5
Pressmen							42.9	47.7	44.0	20.0	11.1	39.0
Printers, lithographers, and pressmen	43.6	50.0	36.3	21.5	7.7	29.5						
Polishers							43.4	56.1	44.0	24.9	14.3	38.1

[1] Figures taken from Bulletin No. 231, Bureau of Labor Statistics, U. S. Department of Labor.

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in the manufacture of the abrasive materials themselves.

The inorganic fraction of the dust in the air of the abrasive factories studied by the writers includes at least four different materials—coke, crude aluminum hydroxide, a fused aluminum compound (aloxite or alundum), and carborundum. The exact harmfulness of coke dust is not yet fully determined and the crude aluminum hydroxide is made up of softer and more rounded particles than the carborundum or the fused aluminum compounds. The last two types of material may for practical purposes be considered to possess the same physical properties. Both derive their chief value from their hardness, which is between 9 and 10, carborundum being said to approach very closely in hardness to the diamond. In addition to this property, these materials also possess the property of fracturing in very irregular particles. We have examined many specimens of these dusts and found them to be exceedingly hard, exceedingly sharp, and made up to the extent of 95 to 100 per cent of inorganic material.

Photomicrographs of several samples of these dusts submitted in Plate 1 illustrate in the main the characteristics referred to.

We have every reason to expect from analogy with other industries in which workers are exposed to a similar hazard, that dusts of this nature should be exceedingly deleterious to health. The results of a study of air dustiness in two large abrasive factories where grinding wheels, or materials for grinding wheels, are manufactured, may therefore be of value in calling attention to a hitherto neglected hazardous industry.

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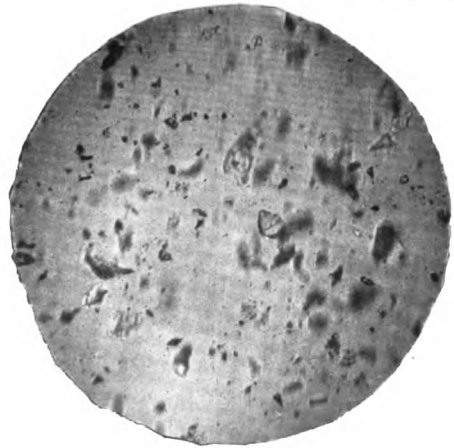

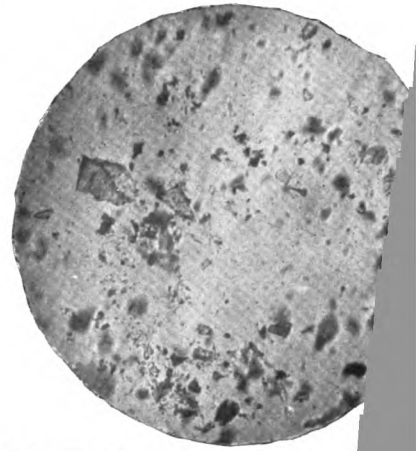

PLATE 1.—PHOTOMICROGRAPHS OF DUST SAMPLES FROM FACTO

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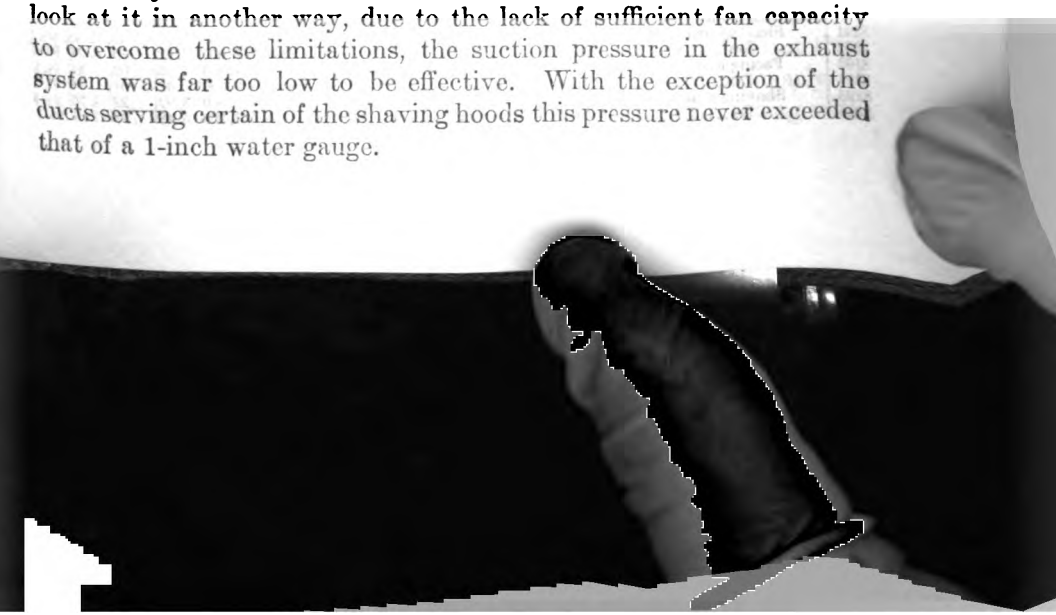
achines in the mix room, and by powerful local exhaust in connection with the lathes.

In the carborundum department of factory B practically no precautions had been taken last summer in either of these workrooms, while in the aloxite department the "new grinding room" was provided with inclosed machinery, and the lathes in the "new lathe room" were equipped with an exhaust system which the management believed to be adequate. A careful examination of the system showed, however, that it was gravely defective in a number of respects. Its principal shortcomings may be profitably cited because they are typical of conditions which are frequently noted in the inspection of exhaust systems designed or operated by those who are unfamiliar with the principles of efficient dust removal.

1. The exhaust ducts were so small that their high frictional resistance greatly increased the cost of operation and made it very difficult to maintain an adequate suction pressure. Furthermore, such small pipes tend to clog with lint and dust, and dealing with the latter tendency was made doubly difficult because an insufficient number of clean-out handholes was provided.

2. The system as installed had been allowed to deteriorate seriously for lack of careful maintenance. Many ducts were noted with broken joints. The dust separators in some cases were in very bad condition, large holes being plugged only with rags and waste.

3. Partly as a result of conditions noted under (1) and (2) or, to look at it in another way, due to the lack of sufficient fan capacity to overcome these limitations, the suction pressure in the exhaust system was far too low to be effective. With the exception of the ducts serving certain of the shaving hoods this pressure never exceeded that of a 1-inch water gauge.



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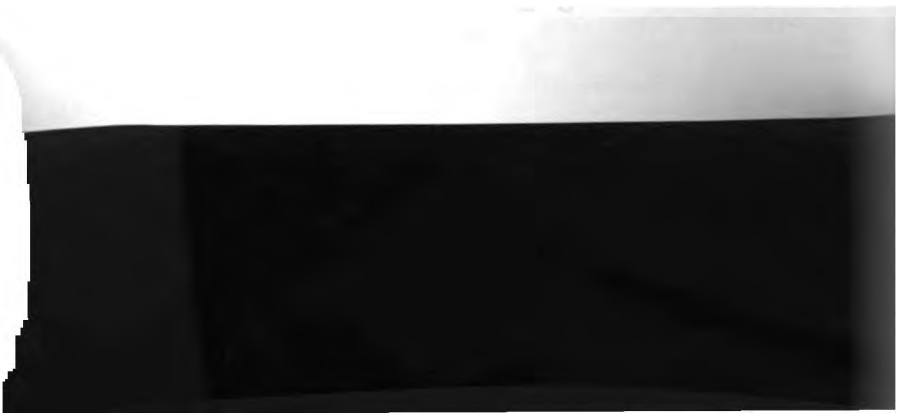
on Standards for Measuring the Efficiency of Exhaust Systems in Polishing Shops (Public Health Reports, Mar. 7, 1919). They are essentially those recommended by the committee on standard methods for the examination of air of the American Public Health Association (American Journal of Public Health, VII, 54).

TABLE III.—*Dust content of air and per cent of inorganic solids in abrasive factory B.*

Sample number.	Sampling position.	Number of particles per cu. ft. of air, classified by size in standard units.			Total number of particles per cu. ft. of air.	Standard units per cu. ft. of air.	Weight of solids, mgs. per cubic foot of air.			Per cent of inorganic solids.
		10 Std. u.	1 Std. u.	½ Std. u.			Total.	Organic.	Inorganic.	
	Old lathe room:									
8131	Center	.....	42,500	2,724,000	2,766,500	723,500	0.57	0.02	0.55	96.5
8132	North end	5,560	56,800	3,625,000	3,687,300	1,018,700	.48	.03	.45	93.7
8133	South end	5,560	77,800	2,134,000	2,217,300	666,900	.38	.03	.35	92.0
8141	Edging machine	.....	.....	1,400,000	1,400,000	350,000	.11	.01	.10	91.7
8142	Do	7,135	14,270	2,091,000	2,112,400	608,800	.23	.01	.22	95.6
8143	Do	.....	3,300	7,415,000	7,418,300	1,857,000	.64	.01	.63	98.3
8144	Do	.....	53,100	2,870,000	2,923,100	770,600	.51	.01	.50	98.0
8145	Facing machine	.....	53,100	5,950,000	6,003,100	1,540,600	.99	.01	.98	99.0
8146	Do	14,820	237,000	17,200,000	17,451,800	4,685,000	4.09	.02	4.07	99.5
	New lathe room:									
8151	Facing machine	.....	333,500	17,500,000	17,833,500	4,708,500	2.64	.03	2.61	98.8
8152	Edging machine	.....	51,800	2,785,000	2,836,800	748,000	.37	.03	.34	92.0
8153	Do	.....	44,500	3,702,000	3,746,500	970,000	.72	.01	.71	98.6
8154	Do	.....	22,200	2,950,000	2,982,200	762,200	.37	.01	.36	97.4
8161	Facing machine	.....	44,500	7,515,000	7,559,500	1,923,300	1.79	.01	1.78	99.4
8162	Do	.....	185,000	4,900,000	5,085,000	1,410,000	1.40	.01	1.39	99.0
8163	Do	.....	118,500	1,869,000	1,987,500	585,800	1.18	.02	1.16	98.3
	Shaving room:									
8191	Shaving machine	59,300	267,000	72,100,000	72,426,300	18,885,000	1.78	.13	1.65	92.7
8192	Do	60,000	333,000	181,000,000	181,453,400	46,247,000	6.62	.39	6.23	94.0
8193	Facing machine	.....	59,300	15,900,000	15,959,000	4,034,300	.36	.02	.34	94.5
8194	Do	.....	118,500	15,590,000	16,068,500	4,105,000	.47	.04	.43	91.5
8195	Shaving machine	29,600	356,000	176,500,000	176,885,600	44,777,000	3.97	.22	3.75	94.4
8196	Do	59,200	296,000	222,500,000	222,855,200	56,513,000	5.48	.32	5.16	94.1



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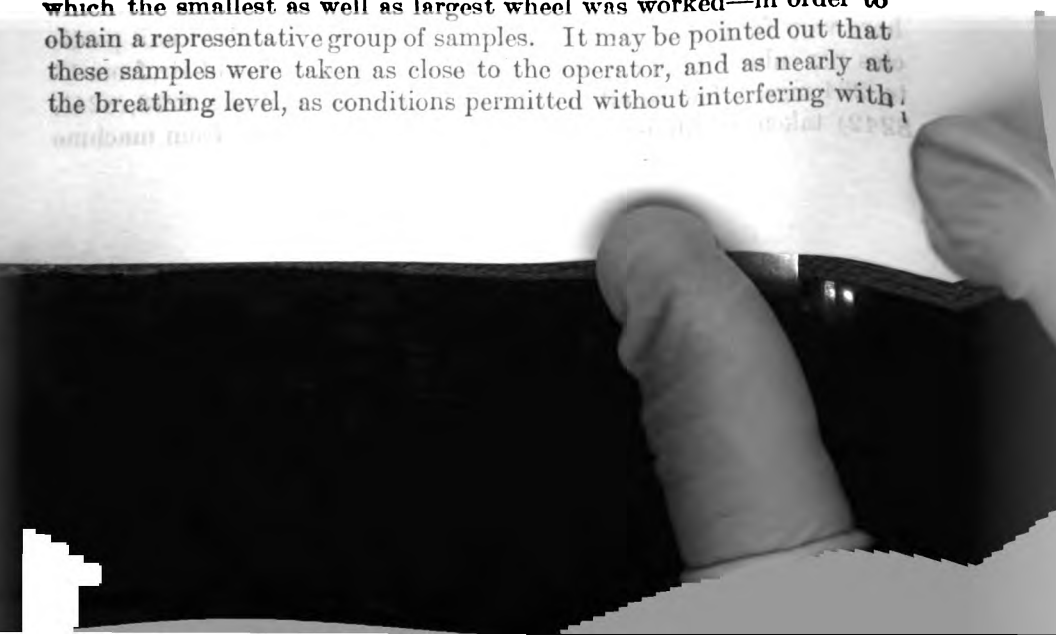
	New lathe room:									
8233	East end	600	12,400	202,000	215,000	68,809	.18	.01	.17	94.8
8241	Center	.....	340,000	9,910,000	10,250,000	2,817,500	.81	.01	.80	98.5
8242	West end	.....	22,200	1,135,000	1,157,000	305,900	.17	.01	.16	94.0

TABLE IV.—*Dust content of air, and weight of dust in mgs. per 100 cubic feet of air in the old lathe room, factory B.*

Sample number.	Sampling position.	Total number of particles (10 microns and under) per cubic foot of air.	Weight of dust, mgs. per 100 cubic feet of air.
8131	Center of lathe room	2,724,000	57.0
8132	North end of lathe room	3,635,000	48.0
8133	South end of lathe room	2,134,000	38.0
8141	Edging machine	1,400,000	11.0
8142	.....do	2,091,000	23.0
8143	.....do	7,415,000	64.0
8144	.....do	2,870,000	51.0
8145	Facing machine	5,950,000	99.0
8146	.....do	17,200,000	409.0

Table IV shows the conditions in regard to air dustiness which existed in the so-called "Old lathe room," in which the carborundum wheels are trimmed to finished dimensions. Almost no measures were taken for the protection of the worker, such exhaust ducts as were present being badly designed, and the suction head, in four cases in which it could be measured, varying between $\frac{3}{8}$ and $1\frac{3}{8}$ inches. Samples were taken at various machines in this room—at those in which the smallest as well as largest wheel was worked—in order to obtain a representative group of samples. It may be pointed out that these samples were taken as close to the operator, and as nearly at the breathing level, as conditions permitted without interfering with



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the work. It appears from this table that the amount of dust varied from 11 to 409 mgs. per 100 cubic feet, and that the microscopic counts of particles (10 microns and under) numbered from 1,400,000 to 17,200,000 per cubic foot of air. On this basis it is easy to calculate in a general way the amount of dust breathed by an individual in a given period of time. Assuming the tidal air of man to be 30.5 cubic inches, and the respiratory rate 17 per minute, then the amount of air breathed per minute will be 518 cubic inches, or 100 cubic feet in 333 minutes (slightly more than 5½ hours). For example, the amount of dust breathed by the worker at the machine at which sample 8146 was taken amounts to 409 mgs. in 5½ hours.

The presence of such large amounts of dust produced a condition of air dustiness which was not confined to the immediate vicinity of the machines, but extended throughout the whole workroom. Samples 8131, 8132, and 8133, taken at points in the lathe room well removed from the machines, illustrate this fact.

TABLE V.—*Dust content of air, and weight of dust in mgs. per 100 cubic feet of air in the new lathe room, factory B.*

Sample number.	Sampling position.	Total number of particles (10 microns and less) per cubic foot of air	Weight of dust, mgs. per 100 cubic feet of air
8131	Facing machine	17,200,000	264
8132	Edging machine	2,765,000	21
8133	....do	3,772,000	31
8134	....do	2,980,000	21
8161	Facing machine	7,515,000	153
8162	....do	4,000,000	105
8163	....do	1,400,000	121
8233	East end of room	202,000	11
8241	Center of room	2,000,000	61
8242	West end of room	1,120,000	21

Table V shows the results obtained in a similar workshop known as the new lathe room in which the aloxite wheels are finished to size. This is the room equipped with a system of exhaust ventilation of which the company was inclined to be proud.

The general impression of an observer on entering the room was, indeed, that it was much less dusty than the old lathe room. The results of our analysis, however, indicate that such was not the case. The optical impression of superiority was probably due to the better lighting, greater floor space, the newness of the room, to the lighter color of the dust, and, perhaps, to the fact that there were fewer very large particles present. The microscopic counts of samples collected here vary from 202,000 to 17,500,000 one-fourth standard unit particles per cubic foot of air, and weights per 100 cubic feet of air, from 11 to 264 mgs. The result of analysis of samples (samples 8233, 8241, 8242) taken at different points in the room, removed from machine

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The next room studied was the shaving room, where, as pointed out above, the problem of dust control is of specially acute importance. Table VI shows our findings here. The weight of dust per 100 cubic feet of air varied from 36.0 to 662.0 mgs. The microscopic counts varied from 15,000,000 to 222,000,000 one-fourth standard unit particles per cubic foot. It is interesting to note that the highest weight and largest count of any obtained in the entire investigations were found in this room.

The impression one gets on watching the operation of shaving the wheels is that the dust produced is in the nature of large particles which should quickly fall to the ground. Our analyses show, however, that the number of small particles remaining in the air is greater here than in any of the other processes investigated. The dust removal methods as used in this room were wholly inadequate, as shown not only by the high dust counts and weights, but also by the determinations of air velocity at the hoods, made by the use of an anemometer, which showed readings between 500 and 700 feet per minute, an exceedingly low velocity for the proper removal of this dust. In addition, the hoods were faulty in design, in that the dust was not removed at the point of origin.

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mgs. per 100 cubic feet of air, and the counts varied from
to 148,800,000 one-fourth standard unit particles per cub
air. The air in the basement, and at other points wher
were taken, was so full of dust that the field investig
though he wore a respirator during the sampling period, e
great discomfort.

The gross pollution of the air in this building was due
the failure to remove properly the dust at the coke crus
the ferro-silicon crusher; and also to the failure to repair br
bucket elevators which lift the crushed material to the st
above.

TABLE VIII.—*Dust content of air, and weight of dust in mgs. per 100 cubi*
the old grinding room, factory B.

Sample number.	Sampling position.	Number particles microns less) pe cubic foo air.
8213	Pan mill	584,
8221	do	3, 200,
8222	Outdoors (gateway)	5, 190,
8223	Pan mill	8, 290,
8224	do	16, 100,
8225	Elevator	32, 500,
8226	Outdoors (yard)	2, 915,

Table VIII shows the result of our analyses in the so
grinding rooms in which the carborundum after being re
the furnace is crushed in pan mills. These mills are l
large pieces of carborundum and during this operation (
about five minutes) the dust produced is most intense.
continue grinding for about 45 minutes and occasionally

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air and the results (samples 8222 and 8226) show this air to be grossly polluted.

Samples 8231 and 8232 (see Table III) were taken in the so-called new grinding room where the aloxite is prepared. The "new" grinding room, like the "new" lathe room, was supposed to be superior to the "old" one and had been equipped with elaborate inclosed machines designed to remove the dust. As a matter of fact, the general impression obtained by ocular observation was that this room was far less dusty than the old grinding room. Here, as in the case of the lathe rooms, ocular evidence appears to be deceptive, since the two samples collected in the new grinding room contained, respectively, 23,800,000 and 11,500,000 one-fourth standard unit particles per cubic foot of air and 563 and 290 mgs. of dust per 100 cubic feet of air.

To summarize the general conditions obtaining in this factory it may be pointed out that 38 air samples from the workrooms showed the following distribution of dust counts, only the one-fourth standard unit particles being considered:

Total of 38 samples.	Number of one-fourth standard unit particles per cubic foot of air.	Total of 38 samples.	Number of one-fourth standard unit particles per cubic foot of air.
2 samples	Under 1 million.	9 samples	10–50 millions.
3 samples	1–2 millions.	3 samples	50–100 millions.
7 samples	2–3 millions.	Do	100–200 millions.
4 samples	3–5 millions.	1 sample	Over 200 millions.
6 samples	5–10 millions.		

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The weight of dust was as follows:

Total of 37 samples.	Mgs. of dust per 100 cubic feet of air.	Total of 37 samples.	Mgs. of dust per 100 cubic feet of air.
8 samples	0- 20.	2 samples	150- 200.
8 samples	20- 50.	6 samples	200- 400.
9 samples	50-100.	5 samples	400- 1,000
4 samples	100-150.		Over 1,000.

The average number of particles per cubic foot of air was 31,000,000 and the average weight was 1.74 mgs. per cubic foot of air or 174.0 mgs. per 100 cubic feet of air.

Of the seven highest dust counts from factory B (containing more than 50,000,000 dust particles per cubic foot), four were from the vicinity of the shaving machines and three from the mix room. Of the five greatest weights (over 400 mgs. per 100 cubic feet of air) two were from the shaving machines and one each from the lathe room, mix room, and grinding room.

For convenience of comparison, the figures cited by Higgins and Lanza for the Joplin mines (Bulletin 132, U. S. Bureau of Mines) have been converted over to the basis of weights in mgs. per 100 cubic feet of air. The Joplin figures classified in groups by weights, distribute themselves as follows:

Total of 221 samples.	Mgs. of dust per 100 cubic feet of air.	Total of 221 samples.	Mgs. of dust per 100 cubic feet of air.
32 samples	0- 20.	12 samples	150- 200.
67 samples	20- 50.	10 samples	200- 400.
63 samples	50- 100.	3 samples	400- 1,000.
30 samples	100-150.	4 samples	Over 1,000.

All samples considered, the conditions in factory B were worse than those found in the Joplin mines, as shown in the following summary, which gives a comparison of percentage distribution of dust weights:

Mgs. of dust per 100 cubic feet of air.	Per cent of samples, factory B (37 samples).	Per cent of samples, Joplin mines (221 samples).
0-20	8.1	14.5
20- 50	21.6	30.3
50- 100	24.3	28.5
100- 150	29.8	28.5
150- 200	5.4	4.5
200-400	10.2	4.5
400- 1,000	13.6	1.4
Over 1,000	0.0	1.8

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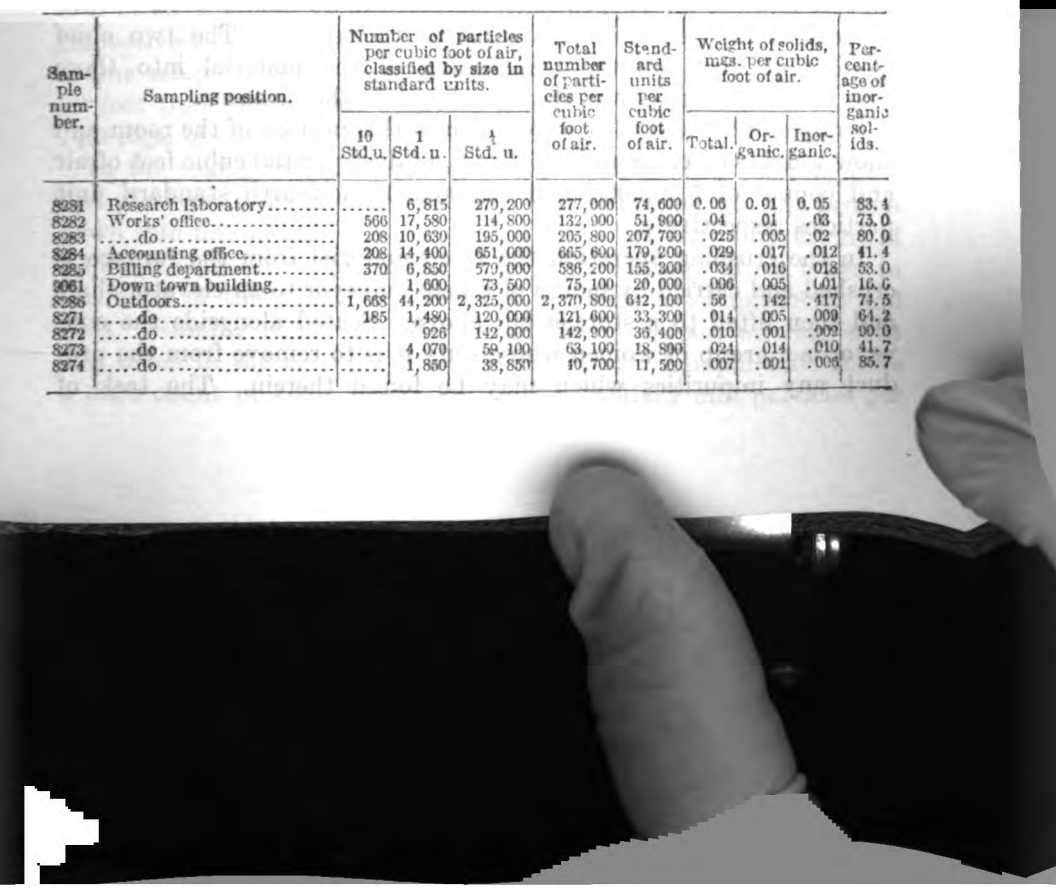
feet of air.

Of the 5 outdoor samples 4 were very satisfactory, but one contained over 2,000,000 one-fourth standard unit particles per cubic foot (55.90 mgs. per 100 cubic feet of air). This sample was taken near a dilapidated and leaking cyclone separator. The 4 good samples were taken on an unusually clear day and to leeward of the factory.

It seems clear from the results tabulated in Table IX that even the office workers and yard helpers in Factory B (many of whom are women) are exposed to serious dangers from industrial tuberculosis, as a result of the inadequate handling of the dust hazard in the production departments of this factory.

TABLE IX.—*Dust content of air in number of particles and weight in mgs. per cubic foot of air in offices and yards, factory B.*

Sample number.	Sampling position.	Number of particles per cubic foot of air, classified by size in standard units.			Total number of particles per cubic foot of air.	Standard units per cubic foot of air.	Weight of solids, mgs. per cubic foot of air.			Percentage of inorganic solids.
		10 Std. u.	1 Std. u.	¼ Std. u.			Total.	Organic.	Inorganic.	
8281	Research laboratory	.....	6,815	270,200	277,000	74,600	0.06	0.01	0.05	83.4
8282	Works' office	566	17,580	114,800	132,900	51,900	.04	.01	.03	73.0
8283	.....do	208	10,630	195,000	205,800	207,700	.025	.005	.02	80.0
8284	Accounting office	208	14,400	651,000	665,600	179,200	.029	.017	.012	41.4
8285	Billing department	370	6,850	579,000	586,200	155,300	.034	.016	.018	53.0
9061	Down town building	.....	1,600	73,500	75,100	20,000	.006	.005	.001	16.6
8286	Outdoors	1,668	44,200	2,325,000	2,370,800	642,100	.56	.142	.417	74.5
8271	.....do	185	1,480	120,000	121,600	33,300	.014	.005	.009	64.2
8272	.....do	.....	926	142,000	142,900	36,400	.010	.001	.009	90.0
8273	.....do	.....	4,070	59,100	63,100	18,800	.024	.014	.010	41.7
8274	.....do	.....	1,850	38,850	40,700	11,500	.007	.001	.006	85.7



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It may be of interest to note that the average size of the particles in the air of the workrooms of factory B was about 0.26 standard units and the weight 0.000000055 mg. The average particle in the polishing shops of factory A as reported by Winslow, Greenburg and Angermyer had a size of 0.28 standard units and weighed 0.000000086 mg. In other words the dust particles in the carborundum works were a little smaller and a little more than two-thirds as heavy as those found in the air of the polishing shops. The dust collected in factory B averaged 86.2 per cent inorganic material, but a considerable percentage of organic material was found in the mixing and grinding rooms.

The Dust Hazard in Abrasive Factory C.

At the second abrasive factory investigated (factory C) crude abrasive material is made and shipped to another city, there to be manufactured into wheels. The process which we studied here consists of the manufacture of an abrasive material, alundum; by the fusing of precipitated aluminum hydroxide in an electric arc furnace, or by the fusing of bauxite with coke in the same manner.

The process as carried on at this plant consists in receiving the aluminum hydroxide in bags, emptying the bags, carting the material to bins on the furnace room floor by means of "buggies," shoveling the material into electric arc furnaces and then fusing it. At the close of the run, the "pig" is removed, cooled, broken into large pieces, crushed, and finally elevated to a storage bin, from which it is run into freight cars.

The industrial operations which give rise to the greatest quantity of dust are the crushing, furnacing, and coke grinding operations, each of which has been studied in detail (see Table X).

The furnacing and crushing operations are carried on in one room. In the furnacing operation the crude material is brought from a storage room to the furnace platform by means of "buggies" and is emptied into open bins before the furnaces, from which place it is shoveled into the furnaces themselves. The two chief sources of dust are the transferring of the material into these bins from the buggies and the shoveling into the furnaces.

Samples 8292 and 8301 were taken in this portion of the room and show weights of 119.9 and 185.7 mgs. of dust per 100 cubic feet of air and counts of 5,500,000 and 13,500,000 one-fourth standard unit particles respectively.

In the crushing operation the fused material from the furnace is crushed and carried by means of a belt conveyor to an elevator shaft and then lifted to a storage bin above. Seated alongside the conveyor is a group of women whose duty it is to remove from the product any impurities which may be found therein. The task of

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8295	West end of room		103,800	4,320,000	4,423,800	1,183,800	.749	.018	.731	97.7
	Furnace room:									
8301	Mix bin		488,000	13,550,000	14,038,000	3,875,500	1.857	.051	1.806	97.4
8302	Storage bin		1,067,000	62,900,000	63,967,000	16,792,000	7.699	.259	7.44	96.7
8303	Coke-grinding room	87,000	10,880,000	669,000,000	679,880,000	179,000,000	21.50	6.35	15.15	70.4
8304	Corridor		2,440,000	316,000,000	318,440,000	81,440,000	8.66	5.92	2.74	31.6
	Outdoors:									
8296	Street near plant		51,800	851,000	902,800	264,600	.127	.016	.111	87.5
8297	200 feet distant		13,030	126,800	139,800	44,700	.051	.019	.032	62.7
9031	¼ mile distant		4,620	310,000	314,600	82,100	.016	.005	.011	68.7
9042	Yard		591	145,800	146,400	37,000	.065	.013	.052	80.0
9052	Residential district	355	533	33,950	34,800	12,600	.005	.003	.002	40.0
9053	Same as 9031		1,776	60,400	62,200	16,900	.005	.002	.003	60.0
9041	Research laboratory		1,970	537,600	539,600	136,400	.013	.007	.006	46.1
9042	Superintendent's office		197	89,200	89,400	22,500	.008	.001	.007	87.4

Two other samples, 8291 and 8293, were taken at points alongside the conveyor at distances of 12 feet and 18 feet from the crusher. These samples also show exceedingly high counts and weights, 17,110,000 and 20,660,000 one-fourth standard unit particles per cubic foot of air, and 297.8 and 420.9 mgs. of dust per 100 cubic feet of air, respectively.

One sample, 8295, of air taken in the west end of the room about 20 feet from the crusher shows a count of 4,320,000 particles and 74.9 mgs. of dust per 100 cubic feet of air.

In the coke-grinding operation, coke, to be used in the manufacture of alundum from bauxite, is shoveled into a crusher and broken down into fine pieces which are carried to a bin above by means of a bucket elevator. The results of the dust analyses of air taken in this part of the plant are shown in the table as samples 8303 and 8304. Number 8303 was taken in the room proper, whereas 8304 was taken in the corridor alongside the room. Sample 8303 shows a dust count of 669,000,000 one-fourth standard unit particles

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cubic foot of air, and a weight of 2,150 mgs. of dust per 100 cubic feet of air, the count and weight in this case being the highest in either plant studied. Sample 8304 shows a count of 316,000,000 one-fourth standard unit particles per cubic foot of air, and a weight of 866 mgs. per 100 cubic feet of air.

Of nine samples of air collected in production departments of the plant, all contained over 1,000,000 one-fourth standard unit particles per cubic foot, and three more than 100,000,000. Of these nine samples all contained over 28.3 mgs. of dust per 100 cubic feet of air. (The standard set by Higgins, Lanza, and others for the Joplin mines is 1 mg. per 100 liters, or 28.3 mgs. per 100 cubic feet.)

In the lower part of Table X are shown the results of analyses of two air samples from the offices in factory C, five outdoor samples in the vicinity, and one control outdoor sample from a residential district of the city. Of the office samples, one collected in the Research Laboratory contained 537,600 one-fourth standard unit particles per cubic foot of air. More significant, however, are the outdoor samples Nos. 8296, 8297, and 9031. The first, collected on the street close to the plant, showed 0.127 mg. of dust per cubic foot. The second was collected about 200 feet farther away, but in the direction in which the wind was blowing the dust from the ventilating stacks over the electric arc furnaces, and showed 0.051 mg. The third sample was taken a quarter of a mile away; but the cloud of dust from the stacks was clearly visible even at this point, and the presence of 0.016 mg. of dust showed appreciable pollution. Sample 9063 taken at the same point as 9031 when the wind was in a different direction, and sample 9062, collected in a residential district free from special pollution, show that the normal dust content of the air at this season was only 0.005 mg. per cubic foot.

The amount of dust present in the air of this plant could be greatly reduced by properly inclosing the crusher, by improved methods of handling and transferring the crude material to the furnaces, and by means of a well-designed hood over the coke crusher.

Comparison of Dust Content of Air in Abrasive Factories with that Reported for Other Industrial Establishments.

It may be interesting to compare these results with those reported for various industries by Miller and Smyth (Journal of the American Medical Association LXX, 599). We have tabulated in Table XI their principal data in comparison with our own and with those obtained by Higgins and Lanza in the Joplin mines.

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ncluding the cement mill studied by Miller and Smyth.

It seems obvious from these results that establishments devoted o the manufacture of abrasive materials may present conditions in egard to aerial dust content that can scarcely be equaled in any ther industry. The study of such conditions and the devising of dequate means for so controlling them as to protect the workers in his trade from the menace of tuberculosis would seem to invite erious attention.

A DISPOSAL STATION FOR A CAN PRIVY SYSTEM.

By E. B. JOHNSON, Chief Sanitary Inspector, United States Public Health Service, Montgomery, Ala.

The method of ultimate disposal of the human excrement collected from a can privy system is undoubtedly a matter requiring most careful consideration. An improperly located disposal station, by reason of objectionable odors, will certainly become a source of complaint on the part of persons residing in its vicinity; and since a sanitary system of this character is frequently judged by such an objectionable feature, a malodorous disposal station might cause the condemnation of an otherwise adequate and effective system.

Fully as important as a suitable location is the proper equipment and management of the disposal station. When the sense of smell is offended, or hands and clothing of employees are soiled, it can not be expected that the attendants necessary to operate the station will remain. The disposal plant at Montgomery, Ala., represents the

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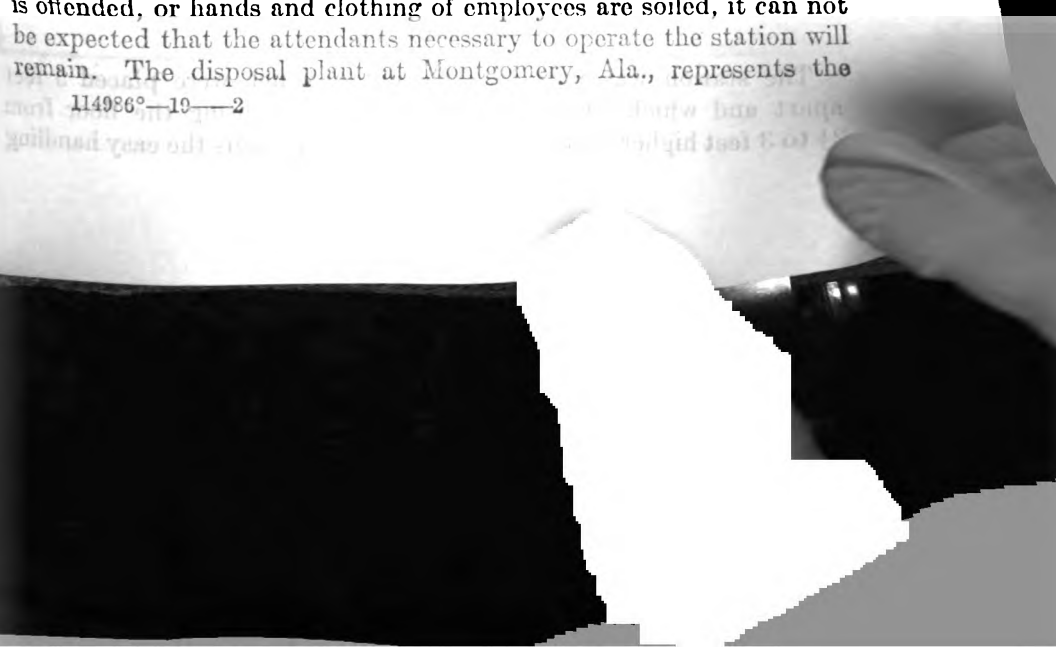

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more recent advances made by the field forces of the Public Health Service in the determination of methods for the installation and operation of such plants and for that reason it is described in detail.

Location.

For the establishment of the disposal station at Montgomery, a plot of ground 150 feet by 100 feet, located on a bluff overlooking the Alabama River, was selected. The nearest dwellings are approximately 300 feet distant, and there are not more than 20 houses within 700 feet of the station. That the station is well located, however, is indicated by the presence of 3,300 privies, in which 3,900 cans are used, within a radius of 1 mile and a half. By locating the disposal station in the center of the available plat, free ventilation has been secured and a reasonable zone maintained between it and adjoining property.

Capacity of Station.

The chief consideration determining the size of the station was the platform room necessary to accommodate the incoming cans. It was estimated that 4,200 weekly (or 700 daily) would be brought through this station, and the assumption was made that not over 30 of these would arrive at one time. To allow for subsequent expansion of the system, however, all further estimates were based on a possibility of 480 arriving at one time; so that the station has really a potential capacity of over 10,000 weekly. Since the cans are changed once a week, the station could dispose of the excreta from a territory containing 10,000 cans, or could serve a number of houses approximately two and one-half times that in the present allotted territory.

Arrangement.

In order to provide space for the 480 cans which might possibly be unloaded at one time, it was decided to build an unloading platform 30 feet by 7 feet, and on the opposite side of the station a loading platform of the same size. Each of these platforms was designed to hold 480 cans in stacks four tiers high. To provide sufficient room in which to work around the hoppers, a space 6 feet wide, running the entire length of the building, was allowed for them between the two platforms. Thus the entire station, when completed, was 30 feet long by 20 feet wide. In figure No. 1 are shown a floor plan of the station (A) and an end elevation (C).

Construction.

The station was built on brick pillars which were placed 5 feet apart and which were of sufficient height to bring the floor from 2½ to 3 feet higher than the driveway. This permits the easy handling

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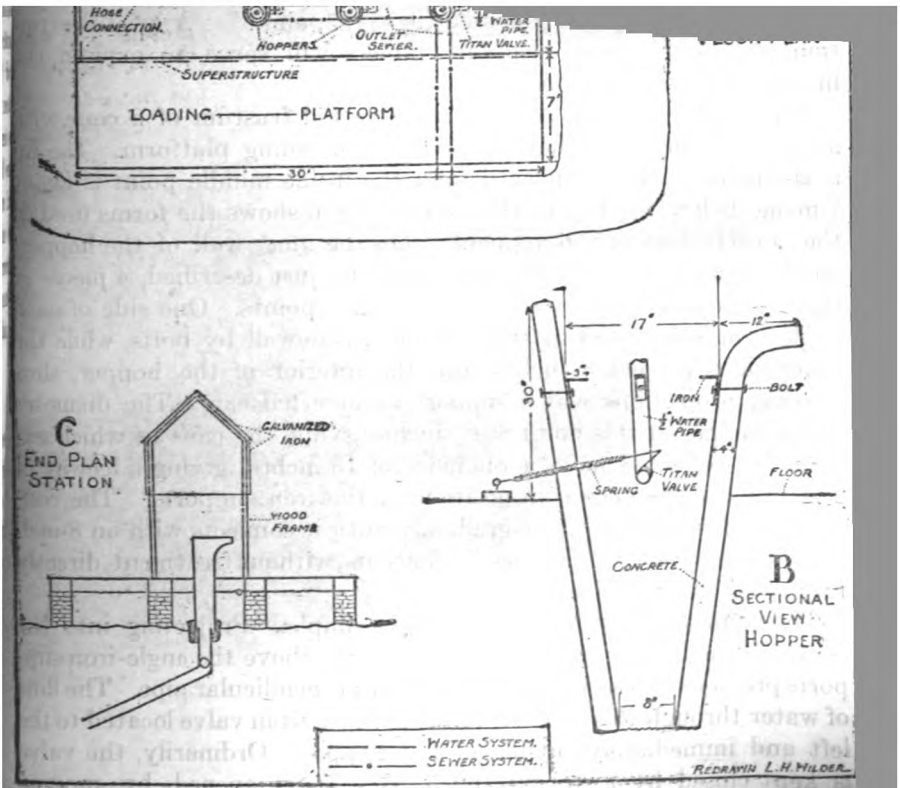

FIG. 1.

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of the cans between the wagons and the platforms. The stringers were 4-inch by 6-inch timbers, and the flooring was made of 2-inch boards. The building proper is 12 feet high at the ridge and 9 feet at the eaves. Corrugated galvanized sheeting was used.

As originally designed, only the central portion of the structure, 6 feet in width, was covered by a roof. In building, this plan was adhered to for the purpose of obtaining thorough ventilation and ample light. Experience has shown, however, that a better plan would be to extend the roof over the entire platform. The attendants need shelter in stormy weather, and the station equipment should be protected against theft and depredation. Figures 1, 2, and 3 illustrate the present arrangement. A roadbed of cinders was built from the street to and around the station.

Hoppers.

The most important and interesting feature of the disposal system is the means by which the excrement is removed from the cans. Three concrete hoppers are used (figs. 4, 5, and 6). A brief description of one of these disposal hoppers will serve to explain the manner in which it is operated.

The hopper has the shape of an inverted frustum of a cone with a lip extending 12 inches toward the unloading platform. The lip is U-shaped, concave upward, and the inside middle point is about 7 inches below the top of the hopper (fig. 6 shows the forms used in the construction of the hoppers). On the inner wall of the hopper and level with the inside bottom of the lip just described, 4 pieces of right-angle iron are placed at equidistant points. One side of each angle iron is fastened to the inner concrete wall by bolts, while the other sides project 3 inches into the interior of the hopper, thus forming projections which support an inverted can. The diameter of the hopper at this point is 17 inches, while the cans in which excreta are collected have a diameter of 15 inches, giving a leeway of 2 inches when the can is in position on the iron supports. The concrete hopper narrows down gradually until it connects with an 8-inch sewer. This sewer discharges its contents, without treatment, directly into the Alabama River.

The apparatus for washing cans is simple. Projecting into the center of the hopper, and to a point 2 inches above the angle-iron supports previously described, is a half-inch perpendicular pipe. The flow of water through this pipe is controlled by a titan valve located to the left and immediately outside of the hopper. Ordinarily, the valve is kept closed by a spring (fig. 1, B). It is opened by moving the lever, and is kept open during the washing operation either

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FIG. 2.

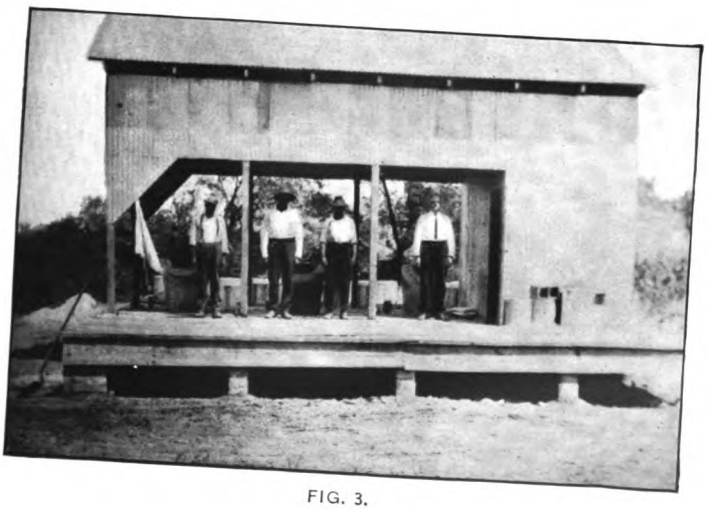

FIG. 3.

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FIG. 4.

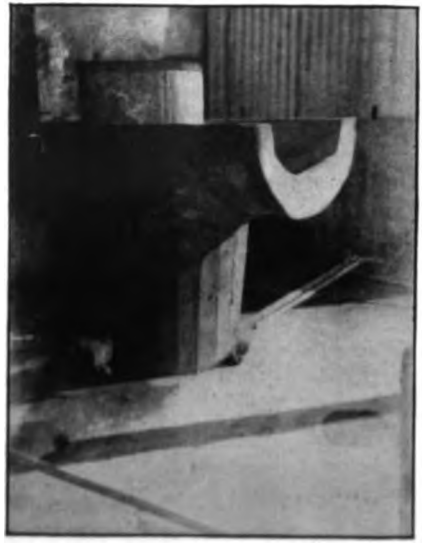

FIG. 5.

FIG 6.

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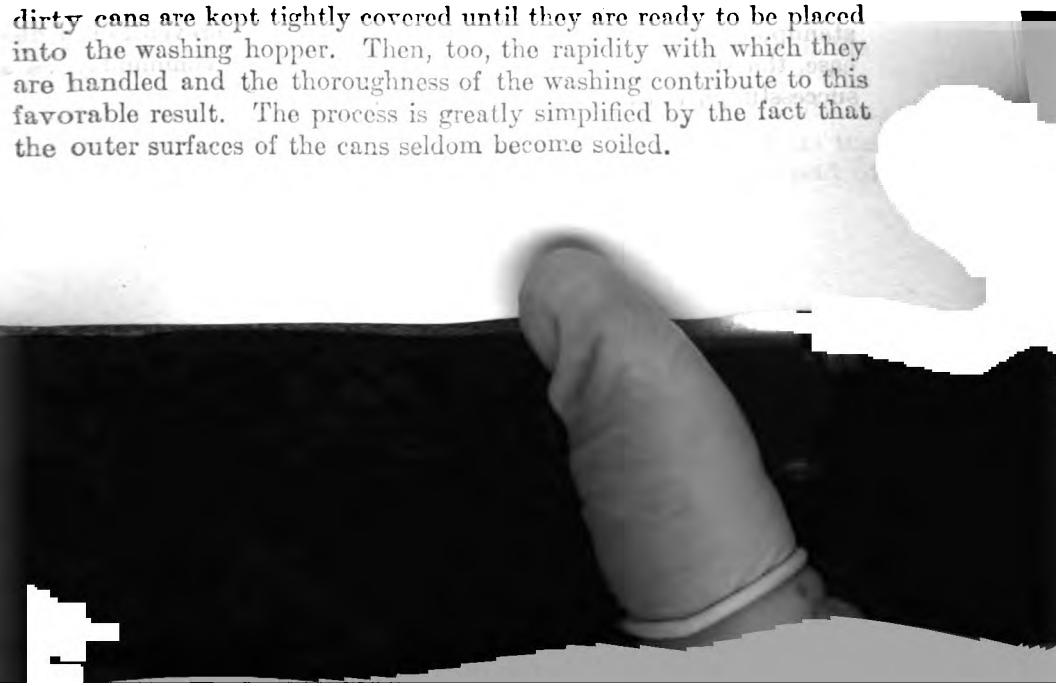
man handling the soiled cans loosens the lid, which is dropped onto the platform topside down, and lifts the can to the lip of the hopper. It is then quickly inverted over the washing pipe and the greater portion of the contents falls into the hopper. The can now being in position for washing, the valve is opened and the half-inch stream of water turned on. The water is allowed to flow for from 40 to 60 seconds, after which time it is shut off by the operator on the loading side and the can removed. In practically every instance a single operation cleans the cans satisfactorily, since only in about 1 per cent of the cases do feces adhere to the inner surfaces after the washing. In such cases this material is loosened by applying a solution of lye by means of a mop. Despite certain apprehensions regarding the possible deleterious action of the lye upon the galvanized surfaces it has been found that no damage has resulted.

A measure not in use at this station, but which has been employed quite generally, is that of immersing the cans, after mechanical cleaning, in a tank of disinfectant solution (such as 1–50 compound cresol solution), leaving about a pint of the solution in the can.

The covers previously upturned on the platform are washed by directing upon them a stream from an ordinary hose.

The comparatively slight odor prevailing at the disposal station, even during the unloading and the cleaning operations, has been a matter for much favorable comment. This is due to the fact that all dirty cans are kept tightly covered until they are ready to be placed into the washing hopper. Then, too, the rapidity with which they are handled and the thoroughness of the washing contribute to this favorable result. The process is greatly simplified by the fact that the outer surfaces of the cans seldom become soiled.



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Cost of the Station and Its Operation.

The disposal station was erected during the war, at a time when the cost of labor and materials was unusually high. Even so, it does not appear that the expense of construction and maintenance has been disproportionate to the success which has attended the project. The items of expense connected with the erection and operation of the main disposal station may be briefly summarized as follows:

Cost of construction:

Plat of ground	$1,[illegible]
Station and hoppers	[illegible]
Sewer, water pipes, and fixtures	[illegible]
Total	[illegible]

Cost of operation (daily):

Foreman	[illegible]
2 laborers, at $2.50	[illegible]
Total	[illegible]

This force handles 700 cans daily, and it could, if necessary, care for 1,200 cans in the same time.

Suggestions for Improvement.

While the present station has served very well the purpose for which it was intended, certain improvements are contemplated which are also to be incorporated in the plans of another station soon to be constructed.

These changes are:

1. A concrete floor with a center drain.
2. A roof over the entire building.
3. Inclosed sides for the building so that the laborers may be protected in stormy weather and the property protected from theft. Sliding or roller doors should be used, thus permitting free ventilation while cans are being discharged or washed.

The disposal station has been in continuous operation in Montgomery for a period of six months. In that time a large number of service cans have been cleaned expeditiously and with practically no objection from persons either working at the station or residing in the neighborhood. From a mechanical as well as from a sanitary standpoint, in which it is an important factor in the prevention of disease, the station has come to be regarded by the community as a successful part of an important system.

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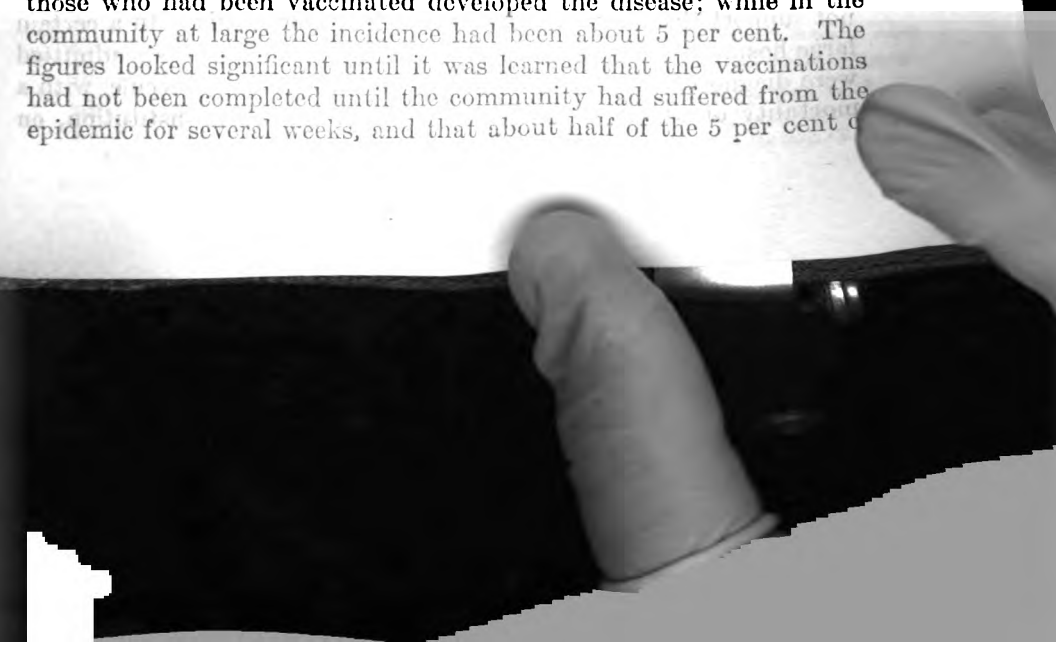
the persons in a given group, prophylactic vaccinations are undertaken more or less promptly, and no cases may occur after the inoculations have been completed. The results appear most impressive when the number of cases among vaccinated and unvaccinated is presented; but when closer examination reveals the fact that so large a proportion of the personnel involved has developed the disease before the vaccinations were done, that in all probability the remainder would not sicken, whether vaccinated or not, the figures lose their significance. An example will, perhaps, make this clearer. It was reported that among a large group of hospital attendants, approximately one-third had been vaccinated and all had remained free from the disease, while the remaining two-thirds of the persons had not been vaccinated, all of whom had developed influenza. This appeared to be a very striking example of the prophylactic value of the vaccine, but when the fact was brought out that the vaccinations were only begun after practically all of the two-thirds mentioned had become ill, the significance attributed to these figures was nullified, while the conviction remained that only the naturally immune had been vaccinated, it being unusual for more than two-thirds of the personnel in any group to develop influenza.

Somewhat similar were the data presented to support a claim for the efficiency of a vaccine which had been used in a large group of persons in a civil community. It was shown that but 2 per cent of those who had been vaccinated developed the disease; while in the community at large the incidence had been about 5 per cent. The figures looked significant until it was learned that the vaccinations had not been completed until the community had suffered from the epidemic for several weeks, and that about half of the 5 per cent



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the disease. Evidence of this sort should be given no consideration, as many of us, the majority, indeed, have escaped the disease without having taken any particular means to prevent it.

We hear of numerous examples of the cure of cases by means of vaccine. I have heard related the most astonishing examples of apparent great benefit from vaccines in the pneumonia that follows influenza. When the records were scrutinized, however, it was found that these remarkable cases could be duplicated by others that had done equally well without vaccine.

In the only examples with which I am familiar in which a vaccine was used on alternate cases, no better results were secured in the vaccinated than in the control group.

The writer suspects that those who have used vaccines most commonly have been more facile in making the diagnosis of a complicating pneumonia than have others. The author has examined numerous clinical records submitted to support the value of vaccines in pneumonia, and many of the cases, judged by the evidence presented, most certainly would not ordinarily have been regarded as pneumonia. Physical signs were equivocal or could probably be attributed to bronchial involvement when there was no definite acceleration of respiration, and the general trend of the record did not support the view that the patient had pneumonia. In a certain large hospital, on one service, about 60 per cent of the cases admitted were diagnosed pneumonia and all were treated with vaccine, with a mortality of about 10 per cent, while in the same institution, on

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er service, about 15 per cent of cases were diagnosed pneumonia he mortality was 40 per cent. In this instance, the actual num- deaths was approximately the same, but vaccine-treated cases d a much lower case-mortality in the pneumonias. I am by ans sure that the higher percentage of pneumonias diagnosed ot have been more nearly accurate than the lower, but it should made the basis of misleading deductions.

only way in which we are to secure promptly acceptable evi- of the value of a bacterial vaccine is by the vaccination of only ion of the individuals in a large group, holding the remainder trols; age, sex, and conditions of exposure being the same in o groups.

the other hand, a vaccine should not be condemned unless con- as just indicated, and unless it has failed to show protective when sufficient time has elapsed after the inoculation to make onably likely that any immunity which may develop will have opportunity to do so.

rge number of vaccines have been used, some made from the za bacillus alone, others from this in conjunction with pneu- ci, staphylococci, and streptococci, and in various combinations; lure of one does not necessarily mean the uselessness of others.

COTIC DRUGS—INTERPRETATION OF HARRISON ACT.

TED STATES SUPREME COURT HOLDS THAT SECTION 2 IS CONSTITUTIONAL.

opinions relative to the so-called Harrison Narcotic Drug Act ecently been rendered by the United States Supreme Court. ases arose under section 2 of the act, the constitutionality section being brought into question.

he first case[1] the defendant, a physician, was indicted for and distributing narcotic drugs unlawfully because not in nce of a written order on a form furnished for the purpose, and ing and distributing narcotic drugs not in the course of pro- al practice. The United States District Court for the western of Texas held that section 2 was unconstitutional because it t a revenue measure but an invasion of the police power d to the States. This decision the Supreme Court reversed, the act to be within the taxing authority of Congress.

ie second case[2] the defendants were convicted and sentenced United States District Court for the western district of Ten- on a charge of conspiracy to violate the Harrison Act. The ere that one of the defendants, a physician, prescribed mor- or habitual users without intent to effect a cure but to keep

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[1] States v. Doremus, 39 Sup. Ct., 214. [2] Webb et al. v. United States, 39 Sup. Ct., 217.

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the users of the drug supplied; and that the other defendant, a druggist, filled these prescriptions with full knowledge of the circumstances. In answer to certain questions certified to the Supreme Court by the Circuit Court of Appeals for the Sixth Circuit, the Supreme Court held as follows: That retail sales of narcotic drugs by druggists to persons without a physician's prescription or without an order on the prescribed form are prohibited; that the prohibition of such sales is constitutional; and that an order for the drugs given by a physician to an habitual user, not in the course of professional treatment to cure the disease but to keep the user supplied with the drugs, is not a "prescription" under exception (b) of section 2 of the act.

This decision means that it is unlawful for a druggist to fill a prescription for narcotic drugs when he has knowledge that the prescription was given for the purpose of supplying the drugs to an addict, and not for treatment. It does not prevent a physician from prescribing narcotic drugs in good faith or a druggist from filling such a prescription.

Portions of the opinion in the first case follow:

* * * This statute [the Harrison Act] purports to be passed under the authority of the Constitution (Art. I, sec. 8), which gives the Congress power "to lay and collect taxes, duties, imposts, and excises to pay the debts and provide for the common defense and general welfare of the United States; but all duties, imposts, and excises shall be uniform throughout the United States."

The only limitation upon the power of Congress to levy excise taxes of the character now under consideration is geographical uniformity throughout the United States. This court has often declared it can not add others. Subject to such limitation, Congress may select the subjects of taxation and may exercise the power conferred at its discretion. (License Tax Cases, 5 Wall., 462, 471.) Of course Congress may act in the exercise of Federal power exert authority wholly reserved to the States. Many decisions of this court have so declared. And from an early day the court has held that the fact that other motives may impel the exercise of Federal taxing power does not authorize the courts to inquire into that subject. If the legislation enacted has some reasonable relation to the exercise of the taxing authority conferred by the Constitution, it can not be invalidated because of the supposed motives which induced it. * * *

Nor is it sufficient to invalidate the taxing authority given to the Congress by the Constitution that the same business may be regulated by the police power of the State (License Tax Cases, 5 Wall., supra).

The act may not be declared unconstitutional because its effect may be to accomplish another purpose as well as the raising of revenue. If the legislation is within the taxing authority of Congress, that is sufficient to sustain it. (In re Kollock, 165 U. S., 526, 536). * * *

Considering the full power of Congress over excise taxation, the decisive question here is, Have the provisions in question any relation to the raising of revenue? That Congress might levy an excise tax upon such dealers, and others who are named in section 1 of the act, can not be successfully disputed. The provisions of section 2, to which we have referred, aim to confine sales to registered dealers and to those dispensing the drugs as physicians, and to those who come to dealers with legitimate prescriptions of physicians. Congress, with full power over the subject, short of arbitrary and unreasonable action, which is not to be assumed, inserted these provisions

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Ligue de Preservation Contre la Tuberculose en France is shown in a poster which has just reached this country. (The original is printed in four colors and measures 32 by 48 inches.) The legend on this poster is one which we should all take to heart, for, despite the nation-wide campaign of educational publicity, there still appears to be far too little realization of the great prevalence of tuberculosis in this country.

NE NOUS ENDORMONS PAS
SUR NOUS LAURIERS,
LA TUBERCULOSE NOUS MENACE,
IL FAUT LA VAINCRE.

EDUCATIONAL CAMPAIGN FOR THE CONTROL OF VENEREAL DISEASES.

The purpose of the educational campaign for furthering venereal disease control is to bring to the people of America a knowledge of the effects of gonorrhea and syphilis on the health and efficiency of the Nation. By presenting this information to the public it is expected

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to secure the cooperation of the people in assisting their State boards of health in carrying on the work.

This information is given by (1) the distribution of pamphlets; (2) lectures, addresses, and conferences; (3) the showing of card exhibits, lantern slides, and motion-picture films.

The material used in the campaign has been carefully prepared and initial publicity has been given by the Division of Venereal Diseases of the United States Public Health Service. The details and follow-up work are being carried out by the various State boards of health cooperating with the Service. The Bureau caused to be distributed a very large number of pamphlets on the subject of venereal diseases, using in this circularization 35 different publications.

Reports of 400 lectures and 18 conferences have been received, but these reports are incomplete in that they do not cover all of the work done by the State boards of health. A total of more than 200,000 registrants in the last draft received instruction in regard to the venereal-disease-control campaign. Card exhibits have been prepared for both adults and boys of high-school age, and sets of these exhibits have been lent to the various State boards of health. Wherever they have been shown unanimous approval and comment thereon have been received. The lantern slides referred to are slides made of the exhibit cards of the "Keeping Fit" exhibit for boys. Motion pictures referring to venereal diseases have been shown to 320 audiences. This includes only the free showings for which invitations are issued.

Special features of the educational campaign are the work being carried on with the cooperation of the Rotary Clubs; the development of programs to be carried out by large employers of labor; the campaign through ministers of the country, 15,000 of whom have pledged their cooperation; the campaign for elimination of advertisement of venereal nostrums and quack doctors from newspapers and magazines; the appeal to druggists for their cooperation and obtaining the absolutely necessary support of the medical profession in securing proper treatment of venereally infected persons.

One phase of the work now being developed, which will be of far-reaching importance, is the organization in each of the 710 cities in the United States having a population of 10,000 and over, of a local committee for stimulating venereal disease control work. This committee is selected upon the recommendations of representative citizens and officials and must be approved by the State board of health. Each city will later be graded on the basis of possibly 1,000 points, according to the medical, educational and law-enforcement measures adopted and carried out by its municipal authorities.

The results of this educational campaign can be measured in some degree by the number of letters received by the Bureau requesting

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ional information in regard to the development of the work. ıg the past eight months, approximately 52,000 such letters been received. Of these letters, 11,000 have been referred to boards of health for reply.

or to April, 1919, 33 State boards of health had provided a y of pamphlets for distribution.

Summary.

r of varieties of pamphlets issued	35
r of lectures, conferences, and motion-picture film showings reported.	738
r of pamphlets purchased or reprinted by State boards of health	1,600,000
r of States having full sets of venereal disease pamphlets (Apr. 1,	33
r of requests for pamphlets received from health officers, physicians, tals, civic organizations, libraries, and other sources	52,000
r of signed agreements of cooperation received from physicians and ists	83,000

ERICAN BAR ASSOCIATION OFFERS COOPERATION IN ANTIVENEREAL DISEASE WORK.

he meeting of the Executive Committee of the American Bar ation in Chicago on April 24, at which meeting a representative Public Health Service was present, the following resolution was nously adopted:

ed, That it is the sense of the executive committee that we cordially indorse, re to cooperate with efforts of the United States Government and the various overnments and municipal authorities in stamping out venereal diseases out the United States.

resolution will be of great service to the various State boards lth in the development of their program for venereal disease , and shows that not only the general public is interested in portant public health work, but that prominent professional are willing to give of their time and effort to develop the n until it is successful.

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Albany, N. Y.	112,565	32	14.8	C.	15.7	2	0.9
Atlanta, Ga.	201,732	47	12.1	C.	17.3	.....	.....
Baltimore, Md.	[2] 669,981	177	13.8	A.	19.2	11	.9
Boston, Mass.	785,245	202	13.4	A.	17.5	24	1.6
Buffalo, N. Y.	473,229	151	16.6	C.	17.0	.....	.....
Cambridge, Mass.	111,432	30	14.0	A.	12.8	.....	.....
Chicago, Ill.	2,596,681	662	13.3	A.	14.5	54	1.1
Cincinnati, Ohio.	418,022	102	12.7	C.	15.7	.....	.....
Cleveland, Ohio.	810,306	162	10.4	C.	11.1	23	1.5
Columbus, Ohio.	225,296	72	16.7	C.	16.2	9	2.1
Dayton, Ohio.	130,655	23	9.2	C.	14.4	4	1.6
Denver, Colo.	.....	52	.....	.....	.....	.....	.....
Fall River, Mass.	128,332	32	13.0	C.	13.8	.....	.....
Grand Rapids, Mich.	135,450	45	17.3	C.	16.2	.....	.....
Indianapolis, Ind.	289,577	58	10.4	C.	14.4	.....	.....
Jersey City, N. J.	318,770	84	13.7	C.	13.2	.....	.....
Kansas City, Mo.	315,785	89	14.8	C.	28.3	7	1.2
Los Angeles, Calif.	568,495	108	9.9	A.	13.0	4	.4
Louisville, Ky.	242,707	59	12.7	C.	15.7	3	.6
Lowell, Mass.	103,081	47	22.5	A.	16.8	2	1.0
Memphis, Tenn.	154,759	47	15.8	C.	11.8	6	2.0
Milwaukee, Wis.	453,481	101	11.6	A.	12.7	17	2.0
Minneapolis, Minn.	383,442	80	10.9	C.	14.3	.....	.....
Nashville, Tenn.	119,215	42	18.4	C.	21.9	9	3.9
Newark, N. J.	428,684	91	11.1	C.	14.2	.....	.....
New Haven, Conn.	154,865	42	14.1	C.	17.2	.....	.....
New Orleans, La.	382,273	119	16.2	A.	20.5	.....	.....
New York, N. Y.	5,215,879	1,354	13.5	C.	14.3	200	2.0
Oakland, Calif.	214,206	47	11.4	A.	11.9	.....	.....
Omaha, Nebr.	180,264	22	6.4	C.	8.1	.....	.....
Philadelphia, Pa.	1,761,371	442	13.1		[3] 15.7	.....	.....
Pittsburgh, Pa.	593,303	156	13.7	C.	18.6	25	2.2
Portland, Oreg.	.....	52	.....	.....	.....	3	.....
Providence, R. I.	263,613	59	11.7	C.	14.2	5	1.0
Richmond, Va.	160,719	38	12.3	C.	17.8	.....	.....
Rochester, N. Y.	264,856	64	12.6	C.	11.4	10	2.0
St. Louis, Mo.	779,951	150	10.0	C.	13.3	.....	.....
St. Paul, Minn.	257,699	59	11.9	C.	11.3	.....	.....
San Francisco, Calif.	478,530	128	13.9	C.	17.9	14	1.5
Seattle, Wash.	.....	69	.....	.....	.....	12	.....
Spokane, Wash.	.....	21	.....	.....	.....	.....	.....
Syracuse, N. Y.	161,404	42	13.6	C.	17.4	6	1.9
Toledo, Ohio.	262,234	62	12.3	A.	14.6	8	1.6
Washington, D. C.	401,681	102	13.2	A	16.0	6	.8
Worcester, Mass.	173,650	48	14.4	C.	12.6	.....	.....

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

lth department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

-CANTONMENT ZONES—CASES REPORTED WEEK ENDED MAY 24.

CAMP DIX ZONE, N .J.

ox:	Cases.
rfield Township	2
a:	
ield Township	1
rfield Township	1
sis:	
rton Township	1

ITTEVILLE SANITARY DISTRICT, N. C.

	4
	11
	1
	3
sis, pulmonary	1

CAMP FUNSTON ZONE, KANS.

ity:	
ieria	1
:	
n pox	7
ieria	3
	2
ing cough	1

FLAME SCHOOL ZONE, GA. AND ALA.

ee County	1
ous	1
ity	1
ous	1
:	
ous	3
r:	
ty	1
ous	4
ee County	1
	1
s:	
us	2
ough:	
us	1

CAMP GORDON ZONE, GA.

Atlanta:	Cases.
Chancroid	1
Chicken pox	13
Diphtheria	2
Dysentery	2
Gonorrhea	41
Malaria	1
Measles	21
Mumps	1
Pneumonia	2
Scarlet fever	9
Smallpox	18
Syphilis	24
Tuberculosis	1
Venereal warts	1
Whooping cough	3

GULFPORT HEALTH DISTRICT, MISS.

Cancer:	
Gulfport	1
Chicken pox:	
Gulfport	1
Dysentery:	
Gulfport	1
Moss Point	2
Gonorrhea:	
Biloxi	1
Gulfport	5
Lorraine	1
Hookworm:	
Biloxi	1
Cuevas	1
Malaria:	
Escatawpa	3
Fenton	1
Gulfport	5
Handsboro	1
Kiln	1
Kreole	1
Logtown	2
Mississippi City	1
Moss Point	5
Pascagoula	2
Van Cleave	1
Measles:	
Ford	4
Pascagoula	1

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GULFPORT HEALTH DISTRICT, MISS.—continued.

	Cases.
Mumps:	
Biloxi	3
Gulfport	3
Kreole	4
Long Beach	1
Lyman	1
Moss Point	1
Saucier	2
Pneumonia:	
Biloxi	1
Gulfport	1
Pass Christian	1
Syphilis:	
Kreole	1
Pascagoula	1
Tuberculosis:	
Biloxi	2
Whooping cough:	
Ford	1
Gulfport	3
Hancock	1
Hovey	5

CAMP A. A. HUMPHREYS ZONE, VA.

Alexandria:	
Mumps	1
Septic sore throat	1
Smallpox	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	7
Diphtheria	1
Mumps	8
Smallpox	1
Tuberculosis	2
Typhoid fever	4
Whooping cough	12
Government clinic:	
Gonorrhea	27
Syphilis	10

CAMP LEE ZONE, VA.

Petersburg:	
Gonorrhea	2
Measles	1
Syphilis	1
Tuberculosis	2

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Lauderdale County:	
Chicken pox	5
Mumps	3
Smallpox	3
Nitrate Plant No. 2:	
Gonorrhea	9
Malaria	2
Mumps	1
Pneumonia	1
Syphilis	4

PICRIC-ACID PLANT ZONE, GA.

Brunswick:	
Chancroid	2
Gonorrhea	18
Pneumonia	1
Syphilis	4
Tetanus	1
Typhoid fever	1

CAMP PIKE ZONE, ARK.

Little Rock:	
Chicken pox	5
Erysipelas	1
Gonorrhea	28
Mumps	1
Pneumonia	1
Scarlet fever	3
Tuberculosis	1
Typhoid fever	1
North Little Rock:	
Malaria	1
Mumps	3
Scarlet fever	3
Syphilis	8
Tuberculosis	1

CAMP POLK ZONE, N. C.

Chicken pox:	
Durham	1
Gonorrhea:	
Durham	7
Marks Creek Township	1
Middle Creek Township	1
Little River Township	1
Raleigh	25
Wake Forest Township	2
Measles:	
Durham	1
Raleigh	1
Mumps:	
Durham	1
Syphilis:	
Durham	2
Raleigh	6
St. Matthews Township	1
Typhoid fever:	
Durham	1
Whooping cough:	
Durham	2
Cedar Fork Township	1
White Oak Township	1

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Chicken pox:	
Norfolk	1
Diphtheria:	
Norfolk	3
Measles:	
Norfolk	4
Port Norfolk	3
Scarlet fever:	
Norfolk	6
Smallpox:	
Norfolk County	1
Portsmouth	2
Varioloid:	
Norfolk County	1

CAMP SHERMAN ZONE, OHIO.

Diphtheria:	
Chillicothe	1
Gonorrhea:	
Government clinic	8
Mumps:	
Chillicothe	6
Scarlet fever:	
Chillicothe	2

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HERMAN ZONE, OHIO—continued.

	Cases.
n Township	1
ment clinic	3

SOUTHER FIELD ZONE, GA.

	1
imal	1

CAMP TRAVIS ZONE, TEX.

:	
pox	1
ia	1
a	22
	1
nia	4
	5
osis	6
fever	1

CAMP UPTON ZONE, N. Y.

	Cases.
Brook Haven:	
Tuberculosis	1
Riverhead:	
Chicken pox	3
German measles	2
Measles	4
Mumps	1
Pneumonia, lobar	1

WILMINGTON SANITARY DISTRICT, N. C.

Wilmington:	
Chicken pox	1
Diphtheria	1
Gonorrhea	25
Mumps	3
Syphilis	5
Tetanus	1
Typhoid fever	8
Tuberculosis	1
Whooping cough	3

E CONDITIONS AMONG TROOPS IN THE UNITED STATES.

llowing data are taken from telegraphic reports received in of the Surgeon General of the United States Army for the ed May 16, 1919. Reports from the American Expeditionary re delayed in transmission, and the "current week" for the American Expeditionary Forces is not the same period nt week" for troops in the United States.

	Current week.	Last week.
sion rate per 1,000 (all causes)	516.00	596.23
in United States	958.86	1,219.96
Expeditionary Forces	341.21	348.71
sion rate per 1,000 (disease only)	450.58	517.27
in United States	827.02	1,029.80
Expeditionary Forces	303.18	309.70
er 1,000 on day of report	38.79	40.04
in United States[1]	50.73	52.68
Expeditionary Forces	34.08	35.04
rate per 1,000 (all causes)	4.97	6.04
in United States[1]	6.66	9.33
Expeditionary Forces	4.30	4.73
rate per 1,000 (disease only)	3.48	4.43
in United States[1]	5.76	7.37
Expeditionary Forces	2.58	3.27

eath rates among troops in the United States will continue to be relatively high, as the ngth of troops in the United States continues to decline from week to week as a result of . Well men only are eligible for discharge, while the sick and otherwise disabled are retained rther treatment. The continued influx of sick and wounded (properly chargeable to com- s) is another factor tending to increase rates in the United States and to diminish corre- ilar rates overseas.

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[illegible]				5					1,440.49	105.74
Taylor	1			5	4	1		1	386.86	119.53
Travis				9	6	1			742.54	63.29
Upton				24	2	2	1		840.51	36.37
Northeastern Department				3	3				490.89	30.23
Eastern Department	1			10	1	1			426.41	19.66
Southeastern Department			2	9	2				591.41	24.27
Central Department				1					393.34	18.40
Southern Department	2			55	6	4			674.19	57.28
Western Department	1			13	7				515.74	16.46
Aviation camps				16	4				637.51	35.45
Ports of embarkation:										
Hoboken	3			33		32	6		1,195.30	74.41
Newport News	3			39	11	1			560.95	25.85
Fort Monroe				6					671.53	23.85
Alcatraz Disciplinary Barracks						3			954.12	36.69
Leavenworth Disciplinary Barracks				1					912.28	54.38
Columbus Barracks							1		705.50	27.13
Jefferson Barracks				7	5				3,662.75	133.93
Fort Logan				4	4	1			1,444.44	50.92
Fort McDowell				3					760.40	22.49
Fort Sill				10	10				419.20	17.17
Fort Slocum				2					491.80	25.22
Fort Thomas				2	2				1,007.04	27.28
West Point									217.83	10.77
Arsenals				5		2			649.63	30.09
Miscellaneous stations				7					495.44	31.17
Total	30		7	532	134	54	13	1	24	824.02	50.73

Number of deaths at large camps in United States, week ended May 16, 1919.

Camp.	Strength.	Deaths.		Camp.	Strength.	Deaths.	
		All causes.	Disease only.			All causes.	Disease only.
Bowie	2,827	0	.....	Taylor	8,737	1	1
Bragg	1,073	0	.....	Travis	4,692	1	.....
Custer	5,357	0	.....	Upton	23,202	2	2
Devens	10,770	1	1	Northeastern Department	2,966	0	.....
Dix	30,939	2	2	Eastern Department	13,789	0	.....
Dodge	6,093	1	0	Southeastern Department	5,891	1	1
Funston	7,343	0	.....	Central Department	3,966	0	.....
Gordon	5,652	0	.....	Southern Department	30,625	1	1
Grant	9,028	0	.....	Western Department	10,991	0	.....
Humphreys	2,266	1	1	Aviation camps	20,316	0	.....
Jackson	6,396	1	1	Port of embarkation:			
Kearney	2,864	1	1	Hoboken	35,760	2	2
Henry Knox	2,212	0	.....	Newport News	17,525	2	2
Lee	6,873	2	2	All others	86,779	27	25
Lewis	4,645	1	1				
Meade	12,285	2	2	Total	405,788	52	47
Pike	5,713	1	.....				
Shelby	3,584	1	1				
Sherman	14,629	1	1				

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Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
.....	3.84	3.35	6.63	7.37
.....	.....	.24	.05	.14
.....	.89	.61	.25	.19
.....	68.57	70.63	39.13	38.32
.....	.....	.....	.45	.04
.....	.12	.12	.20	.78
.....	1.66	2.08	1.11	2.14
.....	.12	.49	1.11	.68
.....	3.07	3.07	.65	.53
.....	6.53	12.16	.....	.....

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended May 24, 1919.

na.—State totals: Typhoid fever 8, malaria 2, smallpox 17, 17, scarlet fever 7, diphtheria 1, whooping cough 7, tuberculmonary) 20.

sas.—State totals: Smallpox 49, malaria 35, measles 10, pox 6, tuberculosis 3, pellagra 2, typhoid fever 1, hook-

nia.—Influenza: Cases reported 176. Smallpox: Cases re-, of which in Long Beach 3, San Francisco 5, Butte County 2, 1, Turlock 1, Whittier 1, San Jose 1, Alameda 1, Los Angeles ial 1. Typhoid fever: Cases reported 9, of which in Los , Riverside 2, Imperial 1, Kern County 1.

ticut.—State totals: Cerebrospinal meningitis: New Haven bury 1. Influenza: Cases reported 7.

re.—Measles: Dover 2, Wilmington 3. Scarlet fever: Wil-3. Smallpox: Fairmount 1. Tuberculosis: Wilmington 3, Lewes 1, Port Penn 1, Seaford 1. Typhoid fever: Blackbird 1.

.—State totals: Typhoid fever 10, malaria 7, smallpox 2, a 7, dysentery 13. Poliomyelitis: Pensacola 1.

.—State totals: Acute infectious conjunctivitis 5, hook-chicken pox 29, diphtheria 5, dysentery (amebic) 32, dys-acillary) 31, gonorrhea 91, influenza 11, malaria 77, measles s 23, paratyphoid fever 3, pneumonia (acute lobar) 21, animals) 4, scarlet fever 6, septic sore throat 6, smallpox is 42, German measles 1, tetanus 1, tuberculosis (pulmonary) ulosis (other than pulmonary) 2, typhoid fever 23, whoop-14.

—Diphtheria: Cases reported 164, of which in Chicago 138. er: Cases reported 114, of which in Chicago 61, Rockford 9, , Freeport 7, Blue Island 4, De Kalb 3. Smallpox: Cases

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reported 147, of which in Maunie 18, Sawyerville 17, Rock Island 14, Norris City 13, Galesburg 9, Pekin 9, Peoria 8, Avena Township (Fayette County) 6, Cobden 5, Rio Township (Knox County) 4, Seaton 4, Lynnville Township (Ogle County) 4, Aledo 3, York Township (Dupage County) 3. Meningitis: Cases reported in Chicago 4. Poliomyelitis: Cases reported in Chicago 2, Chicago Heights 1. Lethargic encephalitis: Chicago 1, Oregon 1. Influenza: Cases reported 22, of which in Chicago 18. Gonorrhea 80, syphilis 25.

Indiana.—Scarlet fever reported by counties: Wabash, Saint Joseph, Hendricks, and Howard. Smallpox reported by counties Allen, Franklin, Monroe, Huntington, Wells, Saint Joseph, and Elkhart. Measles reported by towns: Goshen, South Bend, Gary Greenfield, Carthage, and Elkhart. Mumps reported by towns Knightstown, Elkhart, and Poneto. Diphtheria reported by counties: Grant 2, Wayne 1, Porter 1, Kosciusko 1, and Whitley 1. Rabies reported by towns: Shelbyville, Auburn, Charlestown, Sullivan, and Jeffersonville. Syphilis 34, gonorrhea 63, chancroid 5.

Iowa.—Cerebrospinal meningitis: Melbourne 1. Chancroid: Des Moines 1. Chicken pox: Davenport 1. Diphtheria: Burlington 1, Cedar Rapids 1, Council Bluffs 2, Davenport 2, Dubuque 14, Hawarden 2, Lamoni 4, South Fort Des Moines 1. Gonorrhea: Albia 3, Bidwell 1, Council Bluffs 7, Davenport 11, Des Moines 22, Dubuque 4, Mason City 5, Sioux City 8, Webster City 1. Measles: Council Bluffs 1. Mumps: Dubuque 1, Fort Des Moines 1. Scarlet fever: Burlington 5, Council Bluffs 5, Des Moines 1, Dubuque 1, Harlan 2. Smallpox: Albia 1, Albion 2, Boone 9, Cedar Falls 1, Cedar Rapids 13, Council Bluffs 2, Davenport 18, Des Moines 1, Dubuque 3, Fort Dodge 2, Indianola 1, Mason City 4, Montezuma 1, Ottumwa 5, Stockton 1, Walnut 1. Syphilis: Council Bluffs 1, Davenport 6, Des Moines 15. In rural districts of following counties: Diphtheria Adams 1, Keokuk 1. Scarlet fever: Hardin 6. Smallpox: Keokuk 4, Plymouth 1, Sioux 1.

Kansas.—State totals: Smallpox 56, diphtheria 34, scarlet fever 56, influenza 54.

Louisiana.—Poliomyelitis 1, smallpox 20, typhoid fever 12, diphtheria 15, gonorrhea 122, syphilis 16, chancroid 17.

Maine.—Chicken pox: Portland 1. Diphtheria: Portland 1, Brunswick 1, Porter 1, South Portland 1. Scarlet fever: Oakland 3, Portland 5, Farmington 1, Madison 1, Winslow 1. Smallpox: Bath 2, Winslow 1. Tuberculosis: Anson 1, Bath 1, Brunswick 1, Bucksport 1, Fort Fairfield 1, Bowdoinham 1. Mumps: Sanford 1. Typhoid fever: Bath 1. Whooping cough: Sanford 1. Influenza: Portland 1, Howland 7. Gonorrhea: Portland 15, Lewiston 2, Sanford 2, Westbrook 2, Danforth 2, Bath 3, Greenville 1, Calais 1, Guilford 1, Rangeley 1. Syphilis: Portland 2, Kittery 3, Bath 1.

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achusetts.—Unusual prevalence of measles, Fall River report- and Worcester 61.

esota.—Smallpox (new foci): Becker County (Detroit City) verse County (Dumont village) 1, Wilkin county (Bradford ip) 1. Syphilis 124, gonorrhea 120, chancroid 6, cerebro- neningitis 1, poliomyelitis 1.

York.—State reports, exclusive of New York City: Typhoid ', measles 495, scarlet fever 168, whooping cough 52, diph- 62. Smallpox: North Collins town 1, Maryland 1, Spencer Cerebrospinal meningitis: Buffalo 1, Lackawana 1, Utica 1. elitis: Princetown 1. Pneumonia 88. Voluntary reports: 167, gonorrhea 28.

Carolina.—State totals: Whooping cough 137, measles 240, ia 10, scarlet fever 6, septic sore throat 1, smallpox 59, pox 24, typhoid fever 39, broncho-pneumonia 12, lobar- nia 4, cholera infantum 13, dysentery (bacillary) 14, dysentery 1.

–Scarlet fever: Cincinnati 40, Lima 32. Smallpox: Elyria p (Loraine County) 15, Brush Creek Township (Highland 9, Youngstown 12. Whooping cough: Green Township ; County) 11.

.—Portland reports 18 cases and 2 deaths from influenza, d River 21 cases.

nt.—No unusual prevalence or outbreak.

ia.—Cerebrospinal meningitis: Alexandria 1. Smallpox: County 2.

ngton.—Unusual prevalence of contagious diseases reported. ever: King County 10, Spokane 14, Walla Walla 6, Yakima lpox: Puyallup 4, Tacoma 7, Yakima County 7, Yakima llah 5.

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ns, Hennepin County. Lake Julia Sanatorium, Pupo-sky, Beltrami County.	Dodgeville, Iowa County, Wis..... Menomonie, Dunn County, Wis..... Burris, Ontario, Canada.....	removed Hospita Open case home.

ANTHRAX.

New Jersey Report for April, 1919.

During April, 1919, one case of anthrax was repor
Jersey.

CEREBROSPINAL MENINGITIS.

State Reports for April, 1919.

Place.	New cases reported.
Illinois:	
Carroll County—	
Elk Grove Township	1
Cook County—	
Chicago	8
Kennilworth	1
Ogle County—	
Monroe Township	1
St. Clair County—	
Freeburg	1
Total	12
Iowa:	
Calhoun County	1
Cerro Gordo County	1
Polk County	1
Total	3
Louisiana:	
Allen Parish	1
Calcasieu Parish	2
Lafayette Parish	1

Place.	New cases reported.
Louisiana—Continued.	
Orleans Parish	
St. Mary Parish	
St. Tammany Parish	
Total	
Minnesota:	
Hennepin County—	
Minneapolis	
St. Louis County—	
Aurora	
Duluth	
Total	
Mississippi:	
Chickasaw County	
Harrison County	
Warren County	
Total	

CEREBROSPINAL MENINGITIS—Continued.

State Reports for April, 1919—Continued.

Place.	New cases reported.
County—	
ka	2
ounty	1
unty	7
County	1
ounty	3
unty	3
ounty	2
unty	1
	18
a:	
ounty	1
nd County	1
County	1
ounty	1
n County	1
unty	1
	6
nty	1
County	3
County	1
Ohio—Continued.	
Jefferson County	1
Lorain County	1
Lucas County	1
Montgomery County	1
Pickaway County	1
Summit County	1
Total	11
Rhode Island:	
Coventry (town)	1
Providence	3
Total	4
South Carolina:	
Anderson County	1
Florence County	2
Total	3
Washington:	
King County—	
Seattle	3
Pierce County—	
Tacoma	1
Total	4

City Reports for Week Ended May 10, 1919.

lace.	Cases.	Deaths.	Place.	Cases.	Deaths.
	2	1	Memphis, Tenn	1	
	5	2	New Haven, Conn	2	
io	1		New York, N. Y	12	8
lo	1	1	Paterson, N. J	1	
	1		Philadelphia, Pa	2	
n	1		Pittsburgh, Pa	1	
nd		2	Portsmouth, Va		1
fo	1		Providence, R. I		1
alif		1	St. Joseph, Mo	1	1
	2	1	Trenton, N. J	1	

CHANCROID.

Reported in Extra-Cantonment Zones, Week Ended May 24, 1919.

	Cases.
nitary district, N. C	4
zone, Ga	1
Picric acid plant zone, Ga	2

DIPHTHERIA.

Reported in Extra-Cantonment Zones, Week Ended May 24, 1919.

	Cases.
, N. J	1
zone, Kans	4
one, Ga	2
zone, S. C	1
Portsmouth and Norfolk County health district, Va	3
Camp Sherman zone, Ohio	1
Camp Travis zone, Tex	1
Wilmington sanitary district, N. C	1

iphtheria, measles, scarlet fever, and tuberculosis, page 1225.

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LETHARGIC ENCEPHALITIS.

State Reports for April, 1919.

Place.	New cases reported.	Place.	New cases reported.
Illinois:		Illinois—Continued.	
Cook County—		Sangamon County—	
Chicago	9	Cotton Hill Township	1
De Kalb County—		Vermilion County—	
Cortland Township	1	Sidell	1
Fayette County—		Total	19
Ramsey	1		
Iroquois County—		Louisiana	1
Milford	1		
Lake County—		Nebraska	1
Antioch Township	1		
McDonough County—		North Carolina	1
Macomb	1		

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MALARIA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 24, 1919.

	Cases.
ordon zone, Ga.	1
t health district, Miss.	20
Muscle Shoals sanitary district, Ala.	2
Camp Pike zone, Ark.	1

State Reports for April, 1919.

Place.	New cases reported.
a:	
lia Parish	10
yelles Parish	2
oto Parish	2
Carroll Parish	1
t Parish	6
a Parish	1
yette Parish	2
igsten Parish	2
baries Parish	1
andry Parish	1
artin Parish	6
illion Parish	10
ington Parish	3
ter Parish	1
ns Parish	2
al	50
o:	
s County	18
n County	47
County	96
County	49
n County	15
r County	512
in County	48
County	48
saw County	38
w County	46
na County	53
County	49
ounty	28
na County	297
County	42
ton County	113
o County	50
County	34
lin County	66
County	29
County	42
le County	20
k County	56
a County	36
County	237
s County	165
hreys County	152
na County	27
ba County	40
County	33
County	95
n County	39
n Davis County	20
ounty	61
r County	43
te County	27
County	40
dale County	60
ce County	133
County	59
nty	89
County	60
Mississippi—Continued.	
Lincoln County	61
Lowndes County	60
Madison County	23
Marion County	52
Marshall County	14
Montgomary County	160
Neshoba County	36
Newton County	43
Noxubee County	47
Oktibbeha County	68
Panola County	59
Pearl River County	77
Perry County	41
Pike County	54
Pontotoc County	92
Prentiss County	68
Quitman County	220
Rankin County	55
Scott County	54
Sharkey County	38
Simpson County	60
Smith County	28
Stone County	25
Sunflower County	313
Tallahatchie County	62
Tate County	120
Tippah County	55
Tishomingo County	43
Tunica County	101
Union County	24
Walthall County	20
Warren County	179
Washington County	108
Wayne County	25
Webster County	22
Wilkinson County	24
Winston County	88
Yalobusha County	37
Yazoo County	200
Total	6,008
New Jersey:	
Essex County	1
Mercer County	1
Ocean County	1
Somerset County	1
Total	4
Ohio: Portage County	1
South Carolina:	
Aiken County	1
Bamberg County	1
Clarendon County	8
Dillon County	2
Sumter County	1
Total	13

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See also Diphtheria, measles, scarlet fever, and tuberculosis, page 12

PELLAGRA.

State Reports for April, 1919.

Place.	New cases reported.
Illinois:	
Logan County—	
Lincoln	1
Louisiana:	
East Baton Rouge Parish	1
De Soto Parish	2
Sabine Parish	1
West Carroll Parish	1
Total	5
Mississippi:	
Adams County	8
Alcorn County	3
Amite County	7
Bolivar County	51
Calhoun County	1
Chickasaw County	10
Claiborne County	3
Clarke County	7
Clay County	4
Coahoma County	24
Copiah County	4
Covington County	4
De Soto County	2
Forest County	11
Franklin County	3
George County	3
Greene County	1
Grenada	1
Harrison	8
Hinds County	27
Holmes County	11
Humphreys County	14
Issaquena County	1
Itawamba County	3
Jackson County	1
Jasper County	7
Jefferson Davis County	2
Jones County	6
Lamar County	1
Lauderdale County	4
Lawrence County	14
Leake County	4
Lee County	8
Leflore County	2

Place.	New cases reported.
Mississippi—Continued.	
Lincoln County	
Lowndes County	
Madison County	
Marion County	
Marshall County	
Monroe County	
Neshoba County	
Newton County	
Noxubee County	
Panola County	
Pearl River County	
Perry County	
Pike County	
Pontotoc County	
Prentiss County	
Scott County	
Sharkey County	
Simpson County	
Sunflower County	
Tallahatchie County	
Tate County	
Tippah County	
Tishomingo County	
Tunica County	
Walthall County	
Warren County	
Washington County	
Yalobusha County	
Yazoo County	
Total	
Rhode Island:	
Cranston	
South Carolina:	
Anderson County	
Chester County	
Chesterfield County	
Georgetown County	
Greenwood County	
Laurens County	
Spartanburg County	
Union County	
Total	

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PELLAGRA—Continued.

City Reports for Week Ended May 10, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Ga.		3	Mobile, Ala.		1
ham, Ala.		3	Montgomery, Ala.	2	
, Nebr.		1	Philadelphia, Pa.		1
, Conn.	1	1	Richmond, Va.		1
lo.	1		Tuscaloosa, Ala.	1	
ck, Ark.		1	Wilmington, N. C.		1
, Tenn.		1	Winston-Salem, N. C.	2	1

PNEUMONIA.

ses Reported in Extra-Cantonment Zones, Week Ended May 24, 1919.

	Cases.		Cases.
ame school zone, Ga. and Ala.	3	Picric Acid plant zone, Ga.	1
don zone, Ga.	2	Camp Pike zone, Ark.	1
ealth district, Miss.	3	Camp Travis zone, Tex.	4
oals sanitary district, Ala.	1	Camp Upton zone, N. Y.	1

City Reports for Week Ended May 10, 1919.

Place.	Lobar.		All forms.		Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
o.	2				Los Angeles, Calif.	3	4		
, Mich.	1	1			Lowell, Mass.	3	2		
Mass.	1				Lynn, Mass.	4	2		
k, N. J.	1				Malden, Mass.	1	2		
ans.			3		Manchester, N. H.	1	1		
	2	5			Manitowoc, Wis.			2	2
Md.	22	14			Medford, Mass.	1			
e, La.			4	2	Methuen, Mass.	1			
, J.	1				Milford, Mass.			2	
N. J.			1	1	Montclair, N. J.			2	1
s.	27	12			Mount Vernon, N. Y.	4	2		
Ga.	1	1			Nashville, Tenn.	1	2		
Mass.	4	1			New Britain, Conn.	1	1		
J.	7				Newburgh, N. Y.	1			
s.	3	1			New Orleans, La.	1	6		
			170	68	Newport, Ky.	1	1		
hio.	28	30			Newton, Mass.	2			
s.	1	2			New York, N. Y.			115	202
o.	6	6			Norfolk, Va.	1	2		
h.	11	15	12	30	North Adams, Mass.	1	1		
n.	6	1			Passaic, N. J.	1	1		
, N. J.	1				Paterson, N. J.	9			
J.	2	1			Philadelphia, Pa.	77	37		
	3				Pontiac, Mich.	1			
	3				Reno, Nev.	1	1		
lass.	3	1			Riverside, Calif.	1			
k.	1	1			Roanoke, Va.	1			
, Mass.	2	1			Rochester, N. Y.	12	2		
s, Mich.	3	2			Rome, N. Y.	3			
N. J.			1		Salem, Mass.	1			
s.	3				San Diego, Calif.			2	2
ss.	4	1			Sandusky, Ohio.			2	1
, Mo.			3	1	San Francisco, Calif.	9	6		
			1		Schenectady, N. Y.	2	1		
	1				Somerville, Mass.	2			
lich.	1	1			Springfield, Mass.	3			
Kans.	3				Taunton, Mass.	1			
Mo.			6	7	Toledo, Ohio.	1	1		
	1				Tuscaloosa, Ala.	3			
N. Y.	4				Waterbury, Conn.	1			
hio.	1	1			Watertown, Mass.	1			
ss.	2	1			Westfield, Mass.	2			

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POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for April, 1919.

Place.	New cases reported.
Illinois:	
Champaign County—	
Sidney	1
Cook County—	
Chicago	2
McLean County—	
Danvers	1
Total	4
Michigan:	
Washtenaw County—	
Ann Arbor	1
Wayne County—	
Detroit	1
Total	2
Minnesota:	
Hennepin County—	
Minneapolis	1
Mississippi:	
Walthall County	1
New Jersey:	
Burlington County	1
Middlesex	1
Total	2
North Carolina:	
Beaufort County	1
Jackson County	1
Lenoir County	1
Total	3
Ohio:	
Ashland County	1
Cuyahoga County	1
Hamilton County	2
Mahoning County	1
Tuscarawas County	1
Total	6
Washington:	
Grant County—	
Hartline	1
King County—	
Seattle	1
Okanogan County	1
Pierce County—	
Tacoma	1
Total	4

City Reports for Week Ended May 10, 1919.

Place.	Cases.	Deaths.
Chicago, Ill	3	
Columbus, Ohio	1	
Houston, Tex	1	
Pittsburgh, Pa	1	

RABIES IN ANIMALS.

Kansas City, Mo., Week Ended May 10, 1919.

During the week ended May 10, 1919, one case of rabies in animals was reported at Kansas City, Mo.

ROCKY MOUNTAIN SPOTTED OR TICK FEVER.

Montana Report for April, 1919.

Place.	New cases reported.
Montana:	
Fergus County—	
Grass Range	1
Missoula County—	
Deep Creek	1
Montana—Continued:	
Ravalli County—	
Hamilton (R. F. D.)	1
Total	2

Missoula, Mont., Week Ended May 10, 1919.

One fatal case of Rocky Mountain spotted or tick fever was reported at Missoula, Mont., during the week ended May 10, 1919.

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SCARLET FEVER.

ases Reported in Extra-Cantonment Zones, Week Ended May 24, 1919.

	Cases.		Cases.
lame school zone, Ga. and Ala	1	Portsmouth and Norfolk County health district, Va	4
rdon zone, Ga	9	Camp Sherman zone, Ohio	2
ce zone, Ark	5		

lso Diphtheria, measles, scarlet fever, and tuberculosis, page 1225.

SMALLPOX.

ses Reported in Extra-Cantonment Zones, Week Ended May 24, 1919.

	Cases.		Cases.
ame school zone, Ga. and Ala	5	Portsmouth and Norfolk County health district, Va	3
don zone, Ga	18	Camp Sherman zone, Ohio	1
son zone, S. C	1		
oals sanitary district, Ala	3		

State Reports for April, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
County—						
co Township	1				1	
County—						
tral Lake Township	2				2	
County—						
e	1				1	
oix County—						
ngoline Township	1				1	
unty—						
merfield Township	3				3	
County—						
h Township	3				3	
itt Township	1				1	
ounty—						
nel Township	1				1	
rlotte	1				1	
nd Ledge	5				5	
nontville	2			1	1	
County—						
le Traverse Township	1				1	
County—						
t	1				1	
County—						
emer Township	2				2	
n County—						
ns Township	3				3	
h Range	28				28	
County—						
am Township	3				3	
Lansing	1				1	
ing	101				101	
County—						
awa Township	5				5	
County—						
on	3			2	1	
ty Township	1				1	
oo County—						
mazoo Township	2				2	
mazoo	11				11	
ma Township	1		1			
nty—						
d Rapids	2					2
w County—						
ek	3				3	
ez Township	44			8	36	
County—						
ridge Township	1				1	
eld Township	1		1			
yra Township	2				2	

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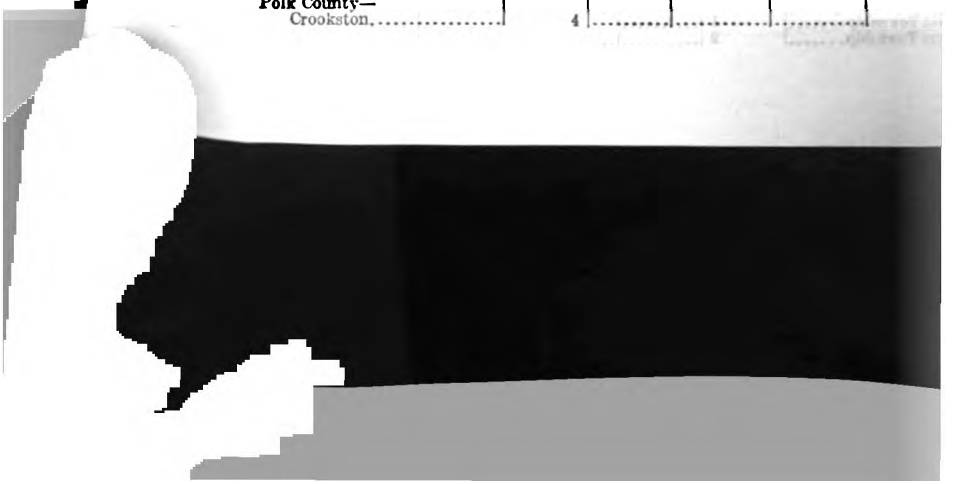
Shiawassee County—					
Laingsburg	6				
Washtenaw County—					
Ann Arbor	3				
Wayne County—					
Detroit	32				
Redford	1			1	
Wyandotte	1				
Total	311		10	13	
Minnesota:					
Benton County—					
Sauk Rapids	1				
Bigstone County—					
Ortonville	1				
Carlton County—					
Cloquet	1				
Clearwater County—					
Bagley	1				
Copley Township	1				
Crow Wing County—					
Brainerd	2				
Dodge County—					
Ripley Township	1			1	
Faribault County—					
Blue Earth	5				
Hennepin County—					
Minneapolis	59			10	
Minnetonka Township	1				
Houston County—					
Caledonia Township	1				
Spring Grove	1				
Hubbard County—					
Nevis Township	4			2	
White Oak Township	2				
Park Rapids	1				
Jackson County—					
Sioux Valley Township	3				
Kanabec County—					
Peace Township	2				
Kandiyohi County—					
Harrison Township	2				
Lake County—					
Two Harbors	2				
Mower County—					
Leroy	1				
Olmsted County—					
Rochester	1				
Ottertail County—					
Fergus Falls	2				
Polk County—					
Crookston	4				



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SMALLPOX—Continued.

State Reports for April, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
a—Continued.						
ey County—						
t. Paul	48				48	
County—						
aribault	9		1		1	7
uis County—						
uluth	6		1		5	
ibbing	1				1	
County—						
akopee	3				3	
agle Creek Township	1				1	
as County—						
. Cloud	9		1		8	
County—						
aples	2		1	1		
rse County—						
heaton	7			7		
ington County—						
illwater	1				1	
Total	186		4	21	146	15
le County—						
eat Falls	5				5	
eau County—						
rt Benton	8				8	
raldine	7				7	
eare Butte	1				1	
County—						
adus	1				1	
os City	21				21	
n County—						
ndive	2				2	
odge County—						
aconda	1				1	
County—						
vistown	5					5
nford	1					1
aw	1					1
d County—						
ston	1					1
itefish	3					3
n County—						
eman (R. F. D. 2)	8					8
County—						
lipsburg	7					7
nd Clark County—						
ena	2					2
r County—						
nep	8				3	
a County—						
soula (R. F. D. 1)	6					6
hell County—						
stone	2				2	
ow County—						
te	1				1	
er County—						
ngtime	1				1	
e County—						
Horn	3				3	
ham	1				1	
nd County—						
owton	14				14	
gesville	1				1	
th Gap	2				2	
Dot	4				4	
tal	112				78	34

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Gallia County	1			
Greene County	11			
Hamilton County	46		5	
Hancock County	17			
Highland County	13			
Holmes County	1			
Jefferson County	9			
Lawrence County	2			
Lorain County	33	1	2	
Lucas County	19			
Mahoning County	33			
Marion County	1			
Medina County	1			
Miami County	16	1	2	
Montgomery County	19		1	
Muskingum County	5			
Ottawa County	3			
Pike County	4			
Preble County	1			
Putnam County	1			
Richland County	2			
Scioto County	4			
Seneca County	10			
Shelby County	5		1	
Stark County	4		2	
Trumbull County	3			
Tuscarawas County	34			
Warren County	1			
Total	427	3	15	

State Reports for April, 1919.

Place.	Cases.	Deaths.
Illinois:		
Adams County—		
Quincy	6	
Alexander County—		
Tamms	1	
Champaign County—		
Champaign	18	
Philo	4	
Urbana	7	
Christian County—		
Owaneco	3	
Stonington	2	
Coles County—		
Charleston	2	
Cook County—		
Chicago	7	
Dekalb County—		
Hinckley	3	
Squaw Grove Township	1	
Illinois—Continued.		
Dewitt County—		
Tunbridge Township.		
Douglas County—		
Tuscola Township		
Dupage County—		
Naperville Township.		
York Township		
Fayette County—		
Avena Township		
St. Elmo		
Fulton County—		
Canton		
Kane County—		
Aurora		
Aurora Township		
Elgin		
Hampshire		
Knox County—		
Galesburg		

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SMALLPOX—Continued.

State Reports for April, 1919—Continued.

Place.	Cases.	Deaths.
itinued.		
County—		
lota	5	
ity—		
oy	17	
oy Township	19	
n	1	
enter Township	21	
Township	6	
unty—		
tur	1	
County—		
yra	13	
County—		
	1	
Alton	2	
on	1	
River Town-		
	1	
unty—		
Township	1	
	1	
on Township	1	
unty—		
a	3	
gh County—		
alem Township	1	
ounty—		
ington	4	
l	1	
unty—		
rsville	1	
ry County—		
nis	5	
ltree Township	1	
unty—		
	2	
nville	3	
nty—		
ville	2	
d	1	
	15	
County—		
	1	
ounty—		
	7	
d County—		
oline	1	
nty—		
burg	2	
Township	1	
County—		
ield	1	
unty—		
lle	2	
	1	
Louis	4	
n	1	
n	2	
n Township	1	
a	1	
County—		
oint Township	1	
unty—		
Township	1	
oria	4	
nd Township	2	
	22	
t	1	
ity—		
precinct	12	
ounty—		
Township	1	
ownship	1	
	9	
nt	12	
own	1	
	1	
	4	
ownship	2	
Illinois—Continued.		
Washington County—		
Du Bois	26	
Wayne County—		
Leech Township	1	
White County—		
Carmi	1	
Norris City	3	
Will County—		
Joliet	1	
Winnebago County—		
Rockford	3	
Total	401	
Iowa:		
Adams County	5	
Blackhawk County	2	
Boone County	23	
Buchanan County	5	
Buena Vista County	9	
Butler County	1	
Calhoun County	1	
Carroll County	1	
Cerro Gordo County	10	
Cherokee County	5	
Dallas County	1	
Decatur County	1	
Des Moines County	1	
Grundy County	6	
Hamilton County	1	
Linn County	33	
Mahaska County	1	
Marshall County	3	
Mills County	1	
Monona County	4	
Monroe County	12	
Montgomery County	2	
Osceola County	1	
Page County	1	
Polk County	16	
Pottawattamie County	13	
Scott County	54	
Shelby County	1	
Wapello County	7	
Webster County	13	
Wright County	1	
Total	235	
Louisiana:		
Acadia Parish	3	
Allen Parish	37	
Beauregard Parish	7	
Caddo Parish	17	
Calcasieu Parish	19	
De Soto Parish	1	
Evangeline Parish	6	
Grant Parish	1	
Iberia Parish	1	
Iberville Parish	3	
Jackson Parish	1	
Jefferson Davis Parish	7	
Lafayette Parish	4	
Morehouse Parish	5	
Orleans Parish	17	
Plaquemines Parish	3	
Rapides Parish	5	
St. Landry Parish	6	
St. Bernard Parish	1	
St. Martin Parish	2	
St. Mary Parish	1	
Union Parish	1	
Vermilion Parish	23	
Vernon Parish	1	
Webster Parish	1	
Winn Parish	6	
Total	179	

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Lauderdale County	10
Lawrence County	6
Leflore County	48
Lowndes County	2
Marshall County	10
Monroe County	8
Montgomery County	4
Oktibbeha County	16
Panola County	3
Pearl River County	4
Perry County	2
Sunflower County	19
Tallahatchie County	8
Tate County	6
Tippah County	2
Washington County	5
Wayne County	12
Total	380
Nebraska:	
Cass County	3
Colfax County	2
Custer County	1
Dodge County	22
Douglas County	92
Furnas County	2
Gage County	4
Jefferson County	12
Johnson County	1
Lancaster County	140
Pierce County	1
Seward County	1
Stanton County	3
Total	284
New Jersey:	
Atlantic County	19
Camden County	2
Cape May County	17
Hudson County	2
Total	40
North Carolina:	
Alamance County	2
Anson County	6
Ashe County	14
Avery County	1
Beaufort County	2
Bertie County	11
Cabarrus County	12
Caswell County	2
Catawba County	3
Chatham County	3
Chowan County	5
Columbus County	2
Cumberland County	9
Dare County	2
Davidson County	1
Davie County	1
Randolph County	
Robeson County	
Rockingham County	
Rowan County	
Rutherford County	
Scotland County	
Stanley County	
Surry County	
Swain County	
Wake County	
Warren County	
Washington County	
Watauga County	
Wilkes County	
Yadkin County	
Total	
North Dakota:	
Bottineau County	
Burleigh County	
Cass County	
Eddy County	
Grand Forks County	
Grant County	
McHenry County	
Mountrail County	
Ranson County	
Sargent County	
Ward County	
Williams County	
Total	
South Carolina:	
Anderson County	
Barnwell County	
Charleston County	
Chesterfield County	
Darlington County	
Laurens County	
Marlboro County	
Richland County	
Total	
Washington:	
Benton County	
Clarke County	
Camas	
Cowlitz County	
Franklin County—	
Pasco	
Grays Harbor County—	
Aberdeen	
Hoquiam	
Montesano	
King County—	
Auburn	
Renton	
Seattle	

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SMALLPOX—Continued.

State Reports for April, 1919—Continued.

Place.	Cases.	Deaths.
n—Continued.		
s County	11	
County—		
tralia	18	
County—		
rington	1	
an County	1	
eros	2	
County—		
rmond	1	
County	3	
onville	1	
allup	1	
oma	54	
County—		
nt Vernon	1	
ish County	4	
rett	7	
Washington—Continued.		
Spokane County	1	
Spokane	17	
Stevens County—		
Chewelah	1	
Thurston County	10	
Olympia	11	
Wahkiakum County	1	
Walla Walla County	1	
Whatcom County—		
Bellingham	2	
Yakima County—		
Sunnyside	7	
Toppenish	6	
Yakima	38	
Total	388	

City Reports for Week Ended May 10, 1919.

Place.	Cases.	Deaths.
Dak	1	
	2	
	1	
ns	17	
	29	
	1	
La	4	1
Wash	1	
t	1	
Ala	1	
Ind	1	
	2	
	7	
	1	
	2	
Iowa	8	
s	7	
yo	1	
	2	
hio	6	
io	25	
ngs, Colo	1	
, Iowa	4	
y	1	
	1	
wa	14	
	1	
	2	
	9	
owa	6	
	1	
a	3	
	3	
	1	
, Ill	1	
	3	
	11	
Wis	1	
ns	1	
nd	4	
ex	3	
	1	
	4	
N. Dak	1	
ont	3	
Mo	4	
nd	3	
ch	4	
ans	1	
lo	6	
in	7	
	6	
La Fayette, Ind	4	
Lincoln, Nebr	15	
Logansport, Ind	6	
Long Beach, Calif	7	
Los Angeles, Calif	13	
Madison, Wis	1	
Manitowoc, Wis	1	
Marshalltown, Iowa	7	
Memphis, Tenn	1	
Middletown, Ohio	1	
Milwaukee, Wis	16	
Mobile, Ala	5	
Moline, Ill	1	
Muskogee, Okla	2	
New Orleans, La	4	
Norfolk, Va	1	
Oakland, Calif	6	
Oklahoma City, Okla	15	
Omaha, Nebr	18	
Oshkosh, Wis	11	
Parsons, Kans	2	
Pekin, Ill	4	
Peoria, Ill	10	
Portland, Oreg	38	
Portsmouth, Ohio	1	
Portsmouth, Va	6	
Racine, Wis	8	
Roanoke, Va	4	
Rock Island, Ill	11	
St. Joseph, Mo	19	
St. Louis, Mo	2	
Salt Lake City, Utah	8	
San Francisco, Calif	7	
Seattle, Wash	33	
Sioux City, Iowa	2	
Sioux Falls, S. Dak	1	
South Bend, Ind	1	
Spartanburg, S. C	3	
Spokane, Wash	5	
Springfield, Mass	1	
Steubenville, Ohio	4	
Superior, Wis	2	
Tacoma, Wash	17	
Toledo, Ohio	5	
Vancouver, Wash	1	
Walla Walla, Wash	2	
Wichita, Kans	8	
Winona, Minn	1	
Winston-Salem, N. C	11	
Yakima, Wash	8	
Youngstown, Ohio	15	
Zanesville, Ohio	1	

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TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended M

	Cases.		
Camp Dix zone, N. J	1	Camp Lee zone, Va	
Fayetteville sanitary district, N. C	1	Camp Pike zone, Ark	
Gas and flame school zone, Ga. and Ala	2	Camp Travis zone, Tex	
Camp Gordon zone, Ga	1	Camp Upton zone, N. Y	
Gulfport health district, Miss	2	Wilmington sanitary district,	
Camp Jackson zone, S. C	2		

See also Diphtheria, measles, scarlet fever, and tuberculosis, pag

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended M

	Cases.		
Camp Jackson zone, S. C	4	Camp Polk zone, N. C	
Picric acid plant zone, Ga	1	Camp Travis zone, Tex	
Camp Pike zone, Ark	1	Wilmington sanitary district,	

State Reports for April, 1919.

Place.	New cases reported.	Place.	
Illinois:		Illinois—Continued.	
Adams County—		Macon County—	
Quincy	1	Decatur	
Champaign County—		Madison County—	
Urbana	1	Alton	
Coles County—		McHenry County—	
Mattoon	4	Woodstock	
Cook County—		McLean County—	
Chicago	18	Bloomington	
Franklin County—		Menard County—	
Valier	1	Petersburg	
Grundy County—		Morgan County—	
Morris	1	Jacksonville	
Hamilton County—		Randolph County—	
McLeansboro	1	Sparta	
Lake County—		Sangamon County—	
North Chicago	4	Springfield	
Waukegan	2	Williamson County—	
LaSalle County—		Marion	
Sheridan	1	Total	

TYPHOID FEVER—Continued.

State Reports for April, 1919—Continued.

Place.	New cases reported.
: ı Parish	1
Parish	5
ion Parish	5
lles Parish	1
lle Parish	1
Parish	1
eu Parish	1
dia Parish	1
o Parish	3
aton Rouge Parish	1
eliciana Parish	1
in Parish	1
le Parish	1
tte Parish	1
;he Parish	4
' Parish	7
ı Parish	1
; Parish	7
ta Parish	2
ıd Parish	6
es Parish	2
tin Parish	3
y Parish	1
ımany Parish	2
ıhoa Parish	5
Parish	1
on Parish	5
Parish	1
gton Parish	2
	73
County—	
ıda	1
County—	
on City	1
County—	
:le Creek	1
County—	
ı Township	1
County—	
t	3
Traverse County—	
'erse City	1
County—	
sing	69
iamston Township	1
ınty—	
tal Falls Township	1
:oo County—	
ımazoo	2
unty—	
ıd Rapids	3
ell Township	1
on County—	
ctah Township	2
n Oak Township	1
n County—	
ılains Township	1
County—	
ıaw	1
County—	
ne City	1
ee County—	
gsburg	1
ounty—	
land Park	1
ndotte	2
tal	95
County—	
ette	1
:duck	1

Place.	New cases reported.
Minnesota—Continued.	
Blue Earth County—	
Madison Lake	2
Cass County—	
Walker	3
Maple Township	1
Walden Township	1
Chippewa County—	
Montevideo	1
Clay County—	
Holy Cross Township	1
Crow Wing County—	
Brainerd	3
Dakota County—	
Rosemount Township	1
Hennepin County—	
Minneapolis	1
Itasca County—	
Nashwauk	2
Kandiyohi County—	
Willmar	1
Koochiching County—	
International Falls	1
Lake County—	
Section Thirty	1
Marshall County—	
New Solum Township	1
Viking Township	1
Olmsted County—	
Rochester	1
Ramsey County—	
St. Paul	4
St. Louis County—	
Duluth	1
Ely	1
Eveleth	2
Gilbert	1
Hibbing	4
Stuntz Township	1
Sherburne County—	
Big Lake	1
Winona County—	
Winona	1
Total	40
Mississippi:	
Adams County	1
Amite County	2
Attala County	3
Bolivar County	13
Calhoun County	1
Carroll County	2
Chickasaw County	1
Choctaw County	2
Coahoma County	1
Copiah County	6
De Soto County	3
Franklin County	7
Greene County	2
Hinds County	3
Jackson County	1
Jasper County	1
Jefferson Davis County	2
Jones County	2
Lafayette County	1
Lee County	1
Lincoln County	1
Madison County	5
Marion County	3
Montgomery County	1
Neshoba County	4
Panola County	1
Pearl River County	2
Pike County	6
Pontotoc County	3
Prentiss County	1

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TYPHOID FEVER—Continued.

State Reports for April, 1910—Continued.

Place	New cases reported.
Mississippi—Continued.	
Quitman County	2
Rankin County	3
Simpson County	4
Sunflower County	2
Tallahatchie County	1
Tate County	5
Tippah County	3
Tishomingo County	12
Union County	3
Warren County	8
Washington County	2
Wilkinson County	2
Winston County	1
Yalobusha County	3
Yazoo County	1
Total	134
Montana:	
Blaine County—	
Harlem	4
Dawson County—	
Myers	1
Fallon County—	
Plevna	1
Flathead County—	
Kalispell (R. F. D.)	3
Lupfer	1
Granite County—	
Philipsburg	4
Missoula County—	
Missoula	7
Ravalli County—	
Hamilton	6
Wheatland County—	
Hedgesville	1
Total	28
Nebraska:	
Knox County	1
New Jersey:	
Atlantic County	1
Camden County	1
Gloucester County	3
Hudson County	1
Mercer County	1
Monmouth County	4
Passaic County	1
Union County	4
Total	16
North Carolina:	
Beaufort County	1
Caldwell County	4
Craven County	1
Davie County	1
Durham County	1
Edgecombe County	1
Forsyth County	1
Franklin County	2
Gaston County	2
Guilford County	1
Harnett County	1
Madison County	1
Martin County	1
Mecklenburg County	2
Nash County	1
New Hanover County	1
Onslow County	1
Person County	4
Pitt County	2

Place	New cases reported.
North Carolina—Continued.	
Richmond County	
Stanly County	
Stokes County	
Surry County	
Wake County	
Wayne County	
Wilkes County	
Total	
North Dakota:	
Burleigh County	
Cass County	
McIntosh County	
Morton County	
Nelson County	
Ramsey County	
Pembina County	
Walsh County	
Total	
Ohio:	
Ashland County	
Ashtabula County	
Athens County	
Clermont County	
Columbiana County	
Crawford County	
Cuyahoga County	
Erie County	
Fulton County	
Gallia County	
Hamilton County	
Highland County	
Jefferson County	
Lawrence County	
Lucas County	
Marion County	
Meigs County	
Montgomery County	
Richland County	
Sandusky County	
Trumbull County	
Washington County	
Wood County	
Total	
Rhode Island:	
Providence	
South Carolina:	
Chesterfield County	
York County	
Total	
Washington:	
Chelan County	
Wenatchee	
Franklin County—	
Pasco	
King County—	
Enumclaw	
Seattle	
Pierce County—	
Tacoma	
Skagit County	
Walla Walla County—	
Walla Walla	
Total	

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TYPHOID FEVER—Continued.

City Reports for Week Ended May 10, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Pa	1		Macon, Ga	1	
	1		Manchester, N. H	6	
Md	5	1	Memphis, Tenn		3
e, La	2	1	Mobile, Ala	1	1
io	1		Nashville, Tenn	1	
n, Ala	2		Newburgh, N. Y	1	
o	2		New Orleans, La	1	
s	1		New York, N. Y	16	2
Ga	2		North Tonawanda, N. Y		1
Y	1		Oakland, Calif		1
Vt	1		Philadelphia, Pa	9	5
S. C	4	1	Pittsburgh, Pa	2	
	6	1	Pittsfield, Mass	1	
hio	1	1	Portland, Me	2	
hio	1		Pottsville, Pa	1	
Iowa	1		Providence, R. I		1
Iowa	1		Quincy, Mass	1	
h	3	1	Richmond, Va	1	
n	1		Riverside, Calif	1	
J	1		St. Joseph, Mo		1
	1		St. Louis, Mo	3	
s	1		Salt Lake City, Utah	1	
ex	3		Sandusky, Ohio	1	
nd	2		San Francisco, Calif	3	
nn		1	Somerville, Mass	1	
J	1	1	Toledo, Ohio	1	1
ich	1		Topeka, Kans	1	
Mich	1		Trenton, N. J	1	
Mo	1		Warren, Pa	1	
s	1		Wausau, Wis	1	
ans	1		White Plains, N. Y		1
y		1	Wilmington, Del	1	
Calif	8		York, Pa	1	
y	2		Zanesville, Ohio		1

THERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for April, 1919.

	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
	644	4,717	526	New Jersey	563	503	485
	46		151	North Carolina	90	1,422	45
	31	49	24	North Dakota	9	76	125
	552	447	607	Ohio	285	1,855	620
	275	713	317	Rhode Island	63	40	81
	70	582	93	South Carolina	33	1	1
	48	155	363	Washington	56	279	219
	21	38	63				

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Atlantic City, N. J.	59,515	15			5		
Attleboro, Mass.	19,776	9					
Auburn, N. Y.	37,823	7	1				
Austin, Tex.	35,612	8					
Bakersfield, Calif.	17,543	5					
Baltimore, Md.	594,637	219	27	4	34		217
Baton Rouge, La.	17,544	7			13		
Battle Creek, Mich.	30,159	1	4	1	31		4
Bayonne, N. J.	72,204		10		1		1
Beatrice, Nebr.	10,437	4	2	1			1
Beaumont, Tex.	38,851	7					
Bedford, Ind.	10,613	2					
Bellaire, Ohio.	14,575	9					1
Belleville, N. J.	12,797		3				
Beloit, Wis.	18,547	5			2		6
Benton Harbor, Mich.	11,099	3			2		
Berkeley, Calif.	60,427	15					
Berlin, N. H.	13,892	3					
Bethlehem, Pa.	14,353		2		21		
Beverly, Mass.	22 128	4					2
Biddeford, Me.	17,760	6					
Billings, Mont.	15,123		1				3
Binghamton, N. Y.	54,864	8	1		4		
Birmingham, Ala.	189,716	52	2		5		3
Bloomfield, N. J.	19,013	2	2	1			3
Bloomington, Ind.	11,661	1	1	1			
Boise, Idaho.	35,951	5					1
Boston, Mass.	767,813	221	42		21		56
Braddock, Pa.	22,060		1				
Brazil, Ind.	10,472				5		
Bridgeport, Conn.	124,724	36	3		6	1	1
Bristol, Conn.	16,318	6	2		3		1
Brockton, Mass.	69,152	10			3		
Brookline, Mass.	33,526	6	1		15		4
Brunswick, Ga.	10,984	3					
Buffalo, N. Y.	475,781	139	46	2	52		15
Burlington, Iowa.	25,144	7					3
Burlington, Vt.	21,802	4			5		1
Butler, Pa.	28,677		1		6		2
Butte, Mont.	44,057		1				1
Cadillac, Mich.	10,158	8	1		3		
Cairo, Ill.	15,995	8			7		
Cambridge, Mass.	114,293	27	3		7		8
Camden, N. J.	108,117		3		4		3
Canton, Ohio.	62,566	10			6		1
Carbondale, Pa.	19,597						1
Chambersburg, Pa.	12,475						1
Champaign, Ill.	15,052	3					
Chanute, Kans.	12,968	3			5		
Charleston, S. C.	61,041	38					
Charleston, W. Va.	31,060	8	2		2		2
Charlotte, N. C.	40,759	13			21		
Chelsea, Mass.	48,405				2		
Chester, Pa.	41,857		3		3		1

[1] Population Apr. 15, 1910.

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Danbury, Conn.	22,931	6					1			
Danville, Ill.	32,969				12				20	
Danville, Va.	20,183	11								
Dayton, Ohio	128,939	52	1		1		3		6	
Decatur, Ill.	41,483	8							7	1
Dedham, Mass.	10,678	1			1					
Denver, Colo.	268,439	69	2		2		2			21
Des Moines, Iowa	104,052		6		1		9			
Detroit, Mich.	619,648	223	50	6	58		44	4	44	25
Dover, N. H.	13,276	4								1
Du Bois, Pa.	14,994						23			
Dubuque, Iowa	40,096		1				1			
Duluth, Minn.	97,077	13	4		34		1			1
Durham, N. C.	26,160	5			8				3	
East Chicago, Ind.	30,286	10								
East Cleveland, Ohio	13,864				1		1			
Easton, Pa.	30,854		3		3				1	
East Orange, N. J.	43,761	5	2				1			
East Providence, R. I.	18,485		1							
East St. Louis, Ill.	77,312	12			3					
Elgin, Ill.	28,562	2					1			
Elizabeth, N. J.	88,830		4	1			13		7	3
Elmira, N. Y.	38,272	5	2		4		3		3	
El Paso, Tex.	69,149	46	1							11
Englewood, N. J.	12,603	1			2					
Erie, Pa.	76,592		5		5		1		10	
Eureka, Calif.	15,142	3			1					
Evanston, Ill.	29,304	4			101		1			
Everett, Mass.	40,160	10					2			1
Fall River, Mass.	129,828	35	1		69	1	3		6	9
Fargo, N. Dak.	17,872	6			12		1			
Farrell, Pa.	10,190		2							
Findlay, Ohio	14,858	4			32				2	
Flint, Mich.	57,386	12	1				1			2
Fond du Lac, Wis.	21,486	11					8			1
Fort Dodge, Iowa	21,039	3								1
Fort Scott, Kans.	10,564	4								
Fort Wayne, Ind.	78,014	23			5					4
Fort Worth, Tex.	109,597	15	1		2		3			
Fostoria, Ohio	10,959	4					1		1	
Framingham, Mass.	14,149	10			15				2	2
Frederick, Md.	11,225	5					2			
Freeport, Ill.	19,844	6								11
Fremont, Nebr.	10,080	6								
Fremont, Ohio	11,054	5								
Fresno, Calif.	36,314	11			1					2
Galesburg, Ill.	24,629	5			17					
Galveston, Tex.	42,650	10							2	
Grand Forks, N. Dak.	16,342	3	1		1		1			
Grand Rapids, Mich.	132,861	29	1		13		8		2	3
Great Falls, Mont.	[1] 13,948		1				7			
Greely, Colo.	11,942	2								
Greenfield, Mass.	12,251		2		2					

[1] Population Apr. 15, 1910.

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Houston, Tex.							
Hudson, N. Y.	12,898	5					
Independence, Mo.	11,964	8			6	1	
Indianapolis, Ind.	233,622	77	2		62		6
Ironton, Ohio	14,079	8					
Ironwood, Mich.	15,095	4					
Ithaca, N. Y.	16,017	3			2		12
Jersey City, N. J.	312,557		16		12		4
Johnstown, N. Y.	10,678	1					
Johnstown, Pa.	70,473		7		7		
Joplin, Mo.	33,400	4					
Kalamazoo, Mich.	50,408	14	1		31		3
Kansas City, Kans.	102,096						4
Kansas City, Mo.	305,816	58	5	1	37		1
Kearny, N. J.	24,325	7	2		1		3
Keene, N. H.	10,725	3			1		
Kenosha, Wis.	32,833	10			32		10
Knoxville, Tenn.	59,112				9		5
Kokomo, Ind.	21,929	7	1				3
Lackawanna, N. Y.	16,219	2	2		5		
La Crosse, Wis.	31,833	7					
La Fayette, Ind.	21,481	2					4
Lakewood, Ohio	23,813	8			2		2
Lancaster, Pa.	51,437		4		19		
Lawrence, Kans.	13,477	3					
Lawrence, Mass.	102,923	23	6				1
Lebanon, Pa.	20,947		1		103		3
Leominster, Mass.	21,365	3			18		
Lexington, Ky.	41,997	15			20		
Lima, Ohio	37,145	11	1		28		14
Lincoln, Nebr.	46,957	12	1				1
Lincoln, R. I.	10,473		1				
Little Rock, Ark.	58,716	8	1				6
Lockport, N. Y.	20,028	6			35		
Logansport, Ind.	21,338	5					2
Long Beach, Calif.	29,163	6					
Long Branch, N. J.	15,733	4					4
Lorain, Ohio	38,266	10	1		2		
Los Angeles, Calif.	535,485	126	6	1	10		4
Louisville, Ky.	240,608	89	9	1	4	1	5
Lowell, Mass.	114,366	31	10	2	12		5
Lynchburg, Va.	33,497	5					
Lynn, Mass.	104,534	27	9	1	49	2	3
McKeesport, Pa.	48,299				4		1
Macon, Ga.	46,099	18					
Madison, Wis.	31,315	12			15		1
Mahanoy City, Pa.	17,709		2				
Malden, Mass.	52,243	16	3	2	3		2
Manchester, Conn.	15,859	2					
Manchester, N. H.	79,607	19	4		1		
Manitowoc, Wis.	13,931	5			4		
Mankato, Minn.	[1] 10,365	1					
Marinette, Wis.	[1] 14,610	3					
Marion, Ind.	19,923	7					7
Marion, Ohio	24,129		1		1		1
Marlboro, Mass.	15,285	7			1		

[1] Population Apr. 15, 1910.

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Montgomery, Ala	23,070			1								
Morristown, N. J	27,087			3		1						2
Moundsville, W. Va	44,039	1				3						
Mount Carmel, Pa	13,410	7						1			1	
Mount Vernon, Ill	11,513	7									1	
Muscatine, Iowa	20,709	3						1				
Muskogee, Okla	10,043							1				
Nanticoke, Pa	17,713	7	1			1					1	
Nashua, N. H	47,173							1			1	1
Nashville, Tenn	23,811											
Natick, Mass	27,541							1				
Newark, Ohio	118,136	12			6	2		1				
New Bedford, Mass	10,140	43						2				
New Britain, Conn	30,317	4				24	1		1			
New Brunswick, N. J	121,622	10								5	7	
Newburgh, N. Y	55,385	28	1		1							
Newburyport, Mass	25,855	15	1			24				2	2	
New Castle, Pa	29,893		1			8	1	1		11	2	
New Haven, Conn	15,291	10						5			2	
New London, Conn	41,915	6				2		2		1	2	
New Orleans, La	152,275					4				1		
Newport, Ky	21,199	37	3							1		
Newport, R. I	377,010	7	2			11		1		14		
Newton, Mass	32,133	118	8	2						10	4	
New York, N. Y	30,585	8				4				2		
Niagara Falls, N. Y	44,345	10						4		21	15	
Norfolk, Va	5,737,492	9	1							3	3	
Norristown, Pa	38,466	1,400	319	24		3		4	1		1	
North Adams, Mass	91,148	14	2	1		185	8	158		1	1	
Northampton, Mass	31,969		1			4		1	4	251	160	
North Tonowanda, N. Y	[1] 22,019					2		1		2		
Norwalk, Conn	20,006	9				87		1			4	
Norwich, Conn	14,060	7						7				
Norwood, Ohio	27,332	8								1	2	
Oakland, Calif	21,923					6		2				
Oak Park, Ill	28,269									1		
Oil City, Pa	206,405	3								1		
Oklahoma City, Okla	27,816	53	5			2				3	1	
Olean, N. Y	20,162	10	2			2		1				
Omaha, Nebr	97,588					48		7		6		
Orange, Conn	16,927	14				44		2		1		
Orange, N. J	177,777	2				2				1		
Oshkosh, Wis	14,393	45						4		1		
Ossining, N. Y	33,636	6				22	1					
Parkersburg, W. Va	36,549	13				1		5				
Pasadena, Calif	14,064										3	
Passaic, N. J	21,059	11		1				4			3	
Paterson, N. J	49,920	7				3						
Peekskill, N. Y	74,478	14	1			11				1	1	
Pekin, Ill	140,512	17	3					2				
Peoria, Ill	19,034		8	1		1		6		3		
Perth Amboy, N. J	10,973	7				1				1		
Philadelphia, Pa	72,184							4		15	1	
Phoenixville, Pa	42,646	20				1						
	1,735,514	8									1	
	11,871	521	76	6	167	3	3			1	1	
					23		1			2	1	
							88		1	105	61	

[1] Population Apr. 15, 1910.

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Racine, Wis.	47,465	10					
Rahway, N. J.	10,361	3					
Raleigh, N. C.	20,274	8	1				1
Reading, Pa.	111,607		3		13		2
Redlands, Calif.	14,573	5					
Reno, Nev.	15,514	8					
Richmond, Va.	158,702	46	2		42		4
Riverside, Calif.	20,496	3			1		
Roanoke, Va.	46,282	15	1		44		8
Rochester, N. Y.	264,714	73	6		6		5
Rockford, Ill.	56,739	10	1		51		6
Rock Island, Ill.	29,452				1		
Rocky Mount, N. C.	12,673	5					
Rome, N. Y.	24,259		1		2		
Rutland, Vt.	15,038	4					
Sacramento, Calif.	68,984	20					2
Saginaw, Mich.	56,469	13	1				
St. Cloud, Minn.	12,013				6		
St. Joseph, Mo.	86,498	37					1
St. Louis, Mo.	768,630	165	29	3	75		26
Salem, Mass.	49,346	10	3				11
Salem, Oreg.	21,274	6					
Salt Lake City, Utah	121,623	30	3				2
San Angelo, Tex.	[1] 10,321	4					
San Bernardino, Calif.	17,616	5					
San Diego, Calif.	56,412		3				1
Sandusky, Ohio.	20,226	10	1				
Sanford, Me.	11,217	2					
San Francisco, Calif.	471,023	145	9	2			11
San Jose, Calif.	39,810						5
Santa Barbara, Calif.	15,360	1					
Saratoga Springs, N. Y.	13,839	3			3		1
Saugus, Mass.	10,210	2					1
Sault Ste. Marie, Mich.	14,130	1					
Schenectady, N. Y.	103,774	17	1		1		2
Scranton, Pa.	149,541		2				10
Seattle, Wash.	366,445		10		61		10
Shamokin, Pa.	21,274		3				1
Shenandoah, Pa.	29,753		3		2		
Sioux Falls, S. Dak.	16,887	2			2		1
Somerville, Mass.	88,618	18	4				5
South Bend, Ind.	70,967	13			10		4
Southbridge, Mass.	14,465	1					
Spartanburg, S. C.	21,985	5					
Spokane, Wash.	157,656						5
Springfield, Ill.	62,623	14					
Springfield, Mass.	108,668	22	4	1	4		1
Springfield, Mo.	41,189	19					
Springfield, Ohio.	52,296	9			24		
Steelton, Pa.	15,759				23		
Steubenville, Ohio.	28,259	6					
Stockton, Calif.	36,209	10	1				
Sunbury, Pa.	16,661				1		
Superior, Wis.	47,167	8					1

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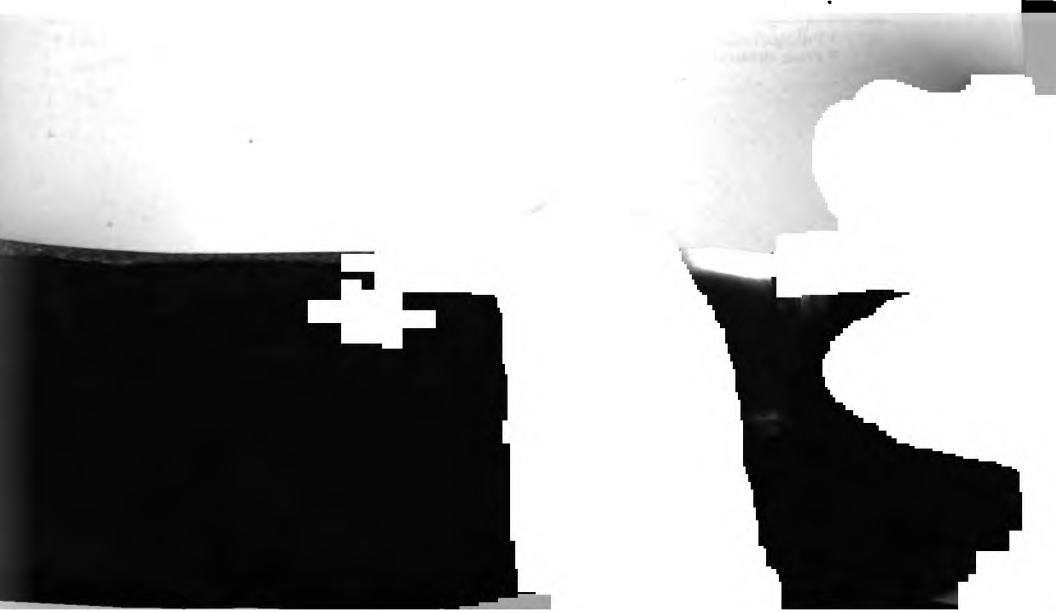
Watertown, Mass	15,188	1					1			
Watertown, N. Y	30,404	5	2				1		1	
Wausau, Wis	19,666	6					5			
West Chester, Pa	13,403						6			
Westfield, Mass	18,769	5	3	1			2			1
West Hoboken, N. J	44,386	8		1	1				2	2
West New York, N. J	19,613	2					1		1	
West Orange, N. J	13,964	2			7				1	
Weymouth, Mass	14,041	4								1
Wheeling, W. Va	43,657	15					1			2
White Plains, N. Y	23,331	9	1				3		1	
Wichita, Kans	73,597				1		1		2	
Wilkes-Barre, Pa	78,334		3		75		2		4	
Wilkinsburg, Pa	23,899				2					
Williamsport, Pa	34,123						1			
Wilmington, Del	95,369						3			5
Wilmington, N. C	30,400	6			1		1			
Winchester, Mass	10,812	2					1			
Winona, Minn	[1] 18,583	9			3					
Winston-Salem, N. C	33,136	14			30				3	
Winthrop, Mass	13,105		1				2			
Woburn, Mass	16,076	2								
Worcester, Mass	166,106	45	8		52	2	5		8	4
Yakima, Wash	22,058						4		2	
Yonkers, N. Y	103,066	12	1		7		3			2
York, Pa	52,770		1		2		10		2	
Youngstown, Ohio	112,282	32	1		118	2	4			3
Zanesville, Ohio	31,320	10			2					

[1] Population Apr. 15, 1910.



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FOREIGN.

AZORES.

Influenza—St. Michaels.

Influenza was reported present on the island of St. Michaels, Azores, April 26, 1919.

CHINA.

Plague—Hongkong.

During the two weeks ended May 17, 1919, 65 fatal cases of plague were notified at Hongkong, China.

UNION OF SOUTH AFRICA.

Influenza—Johannesburg.

Recrudescence of influenza was reported at Johannesburg, Union of South Africa, March 22, 1919. According to information dated March 6, 1919, influenza has been declared a notifiable disease in the Union of South Africa.

Influenza was reported prevalent with high mortality throughout the Union of South Africa in October, 1918. At Johannesburg many fatalities resulting from pneumonia were reported.[1]

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended May 30, 1919.[2]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
India:				
Bombay	Mar. 9-22	10	7	
Calcutta	Mar. 30-Apr. 5		209	
Rangoon	Feb. 23-Mar. 22	26	22	
Java:				
East Java				Mar. 14-27, 1919: Cases, 7; deaths, 2.
Surabaya	Mar. 14-27	6	2	

[1] Public Health Reports, Dec. 20, 1918, p. 2296.
[2] From medical officers of the Public Health Service, American consuls, and other sources.

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LERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.—Continued.

Reports Received During Week Ended May 30, 1919—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
ıgkong	May 4–17		65	
r:				
ıyaquil	Apr. 1–15	1	1	
ıbay	Mar. 9–22	68	46	Mar. 16–29, 1919: Cases, 9,570; deaths, 7,047.
ıtta	Mar. 30–Apr. 5		26	
achi	Mar. 23–Apr. 12	37	28	
ras	Mar. 31–Apr. 5	75	56	
goon	Feb. 23–Mar. 22	132	120	
el:				
. Sparta	May 21	1	1	At Liverpool, England, from Bombay.

SMALLPOX.

ers	Mar. 1–31		1	
Paulo	Mar. 10–16		1	
a Scotia—				
Halifax	May 4–10	23		
Sydney	do	2		
bec—				
Montreal	do	1		
Quebec	do	2		
nbo	Mar. 24–29	1		
y	Mar. 25–Apr. 7	4		
ıgking	Mar. 23–29			Present.
andria	Apr. 9–22	9	3	
bay	Mar. 9–22	161	75	
ıtta	Mar. 30–Apr. 5		80	
chi	Mar. 23–Apr. 12	37	28	
ss	Mar. 30–Apr. 5	45	23	
oon	Feb. 23–Mar. 22	481	170	
orn	Apr. 14–20	1		Varioloid.
ne	Mar. 24–30	1		
mo	Apr. 3–16	23	2	
ı	Mar. 17–23	1		
oku	Apr. 2–15	5		
Java				Mar. 16–27, 1919: Cases, 252; deaths, 56.
atavia	Mar. 14–27	8	2	
a:				
a	Apr. 8–14	1		
e City	Mar. 30–May 3	11		
land				May 3–9, 1919: Cases, outports, 26.
ıns	May 3–9	2		
o	Apr. 13–26	43	34	
cia	Mar. 16–29	75	39	

TYPHUS FEVER.

ıg	Apr. 14–20	1	
ndria	Apr. 9–22	170	37
ı	Apr. 14–27	9	2
aki	Apr. 14–20	7	

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Place.	Date.	Cases.	Deaths.	Rem
Ceylon:				
Colombo	Nov. 17-30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13-19	1		On a barge.
Marienwerder				1 case in October in canal.
India:				
Bombay	Aug. 18-Dec. 28	1,351	1,031	
Do	Dec. 29-Mar. 8	9,681	8,503	
Calcutta	Sept. 20-Dec. 21		241	Report for Nov.
Do	Dec. 29-Mar. 22		945	
Karachi	Jan. 26-Mar. 22	3	3	
Madras	Oct. 5-Dec. 28	264	164	Oct. 27-Nov. 2,
Do	Jan. 5-Mar. 29	430	299	deaths, 4.
Rangoon	Oct. 5-Dec. 21	35	35	
Do	Dec. 29-Feb. 22	15	11	
Indo-China				July 1-Oct. 31,
Anam	July 1-Aug. 31	37	30	deaths, 472.
Cambodia	July 1-Oct. 31	324	171	
Cochin China	do	436	337	
Saigon	Oct. 7-Dec. 22	75	45	
Do	Dec. 3-Mar. 23	456	267	
Kwang-Chow-Wan	July 1-31	50	34	
Tonkin	July 1-Oct. 31	6		
Java:				
East Java				Oct. 7-Dec. 31, 1
Surabaya district	Oct. 7-Dec. 31	655	423	deaths, 323. J
Do	Jan. 1-Mar. 11	381	280	1919: Cases, 749;
Mid-Java				Sept. 25-Dec. 1
Samarang	Sept. 26-Oct. 16	120	111	3,282; deaths, Feb. 20, 1919: deaths, 928.
West Java				Oct. 3-Dec. 11, 1
Batavia	Oct. 3-Dec. 11	291	148	deaths, 238. De
Do	Dec. 27-Jan. 23	8	2	23, 1919: Cases,
Cheribon	Jan. 3-9	1		
Mesopotamia:				
Bagdad	Oct. 11-18	8		
Philippine Islands:				
Manila	Sept. 22-Dec. 28	209	135	
Do	Dec. 29-Mar. 29	25	13	
Do	Apr. 6-12	4	1	
Provinces				Nov. 2-Dec. 28, 191
Albay	Dec. 15-21	1	1	deaths, 1,515. I
Ambos Camarines	Feb. 15-21	10	2	Mar. 29, 1919:
Bataan	Nov. 17-Dec. 28	38	32	deaths, 917. Ap
Batangas	Nov. 2-Dec. 28	258	230	Cases, 53; deaths,
Do	Dec. 29-Mar. 29	71	55	
Do	Apr. 6-12	5	2	

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Nueva Ecija	Jan. 12–25	9	6	
Occidental Negros	Feb. 2–Mar. 21	8	5	
Oriental Negros	Nov. 2–Dec. 7	32	18	
Do	Jan. 5–Feb. 8	35	22	
Pampanga	Nov. 24–Dec. 14	4	4	
Do	Jan. 5–Mar. 29	51	38	
Do	Apr. 6–12	28	21	
Pangasinan	Nov 2–Dec. 28	930	652	
Do	Dec. 29–Mar. 29	167	129	
Do	Apr. 6–12	1	1	
Rizal	Oct. 27–Nov. 2	3	1	
Do	Nov. 24–30	16	5	
Samar	Dec. 15–21	8	1	
Sorsogon	Nov. 17–23	8	4	
Do	Jan. 19–Feb. 8	44	36	
Tayabas	Nov. 2–Dec. 28	64	31	
Do	Nov. 10–Dec. 28	54	25	
Do	Dec. 29–Feb. 15	69	62	
Union	Nov. 2–Dec. 28	18	14	
Zamboanga	Dec. 8–28	27	19	
Do	Jan. 5–Feb. 8	25	21	
Poland:				
Plonsk district	Oct. 2–Nov. 27	5	.....	
Warsaw	Sept. 29–Oct. 26	5	1	
Russia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17–Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 5–Aug. 21, 1918: Cases, 881; deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 279.
Ukraine:				
Ekaterinaslav	Sept. 1–20	7	6	
Odessa	.....do	25	.....	Sept. 1–20, 1918: 11 cases on s. s. Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27–Nov. 2	1	1	
Do	Feb. 9–Mar. 22	13	10	
China:				
Amoy	Nov. 24–Dec. 8	.....	.....	Present.
Chungking	Dec. 1–7	.....	.....	Do.
Hing-Ning district	Mar. 15	.....	.....	Do.
Hongkong	Oct. 1–Dec. 28	4	4	
Do	Jan. 1–Mar. 15	18	15	

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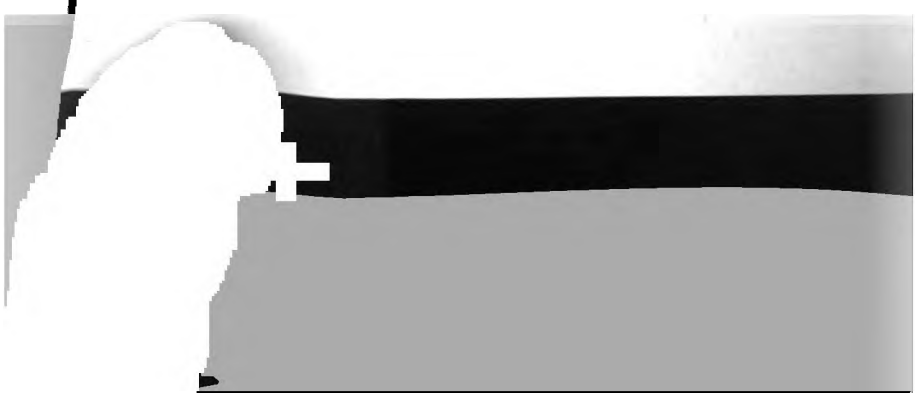
Do	Jan. 12–Mar. 8	6	6	[illegible]
Calcutta	Dec. 22–28		1	deaths, 19,4
Do	Jan. 12–Mar. 22		57	Cases, 4,302;
Karachi	Oct. 19–Dec. 28	17	17	
Do	Dec. 29–Mar. 22	18	16	
Madras	Dec. 8–28	26	17	
Do	Dec. 29–Mar. 6	131	61	
Madras Presidency	Oct. 13–Dec. 28	1,152	774	Oct. 27–Nov.
Do	Dec. 29–Mar. 8	2,562	1,726	deaths, 38.
Rangoon	Oct. 5–Dec. 21	84	51	
Do	Dec. 29–Feb. 22	107	100	
Indo-China				July 1–Oct. 2
Anam	July 1–Oct. 31	43	38	Deaths, 145.
Cambodia	do	72	72	
Cochin-China	do	45	35	
Saigon	Oct. 7–Nov. 24	5	1	
Do	Jan. 13–Mar. 28	14	10	City and vicini
Kwang-Chow-Wan	July 1–31	1	1	
Java:				
East Java				Oct. 7–Nov. 1
Surabaya (district)	Oct. 7–Dec. 31	92	92	deaths, 169.
Do	Jan. 1–Feb. 25	49	49	1919: Cases, 1
Mid-Java				Sept. 25–Oct. 1
Samarang	Sept. 25–Oct. 16	6	6	deaths, 14.
Mesopotamia:				1919: Cases, 1
Bagdad	Nov. 16–29	5	2	
Do	Feb. 22–Mar. 14	45	20	
Siam:				
Bangkok	Sept. 21–Oct. 12	6	5	
Do	Jan. 19–Feb. 22	7	6	
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quaran
				Bombay.

SMALLPOX.

Algeria:				
Algiers	Oct. 1–Dec. 31	2	1	
Austria				Dec. 1, 1918–Jan.
Vienna	Dec. 1–Jan. 11	6		68. Jan. 12–Fe
				57.
Bohemia				Feb., 1919: Rep
Gablonz	Mar. 1–31	26		March, 1919: C
Brazil:				
Rio de Janeiro	Dec. 1–28	46	19	Oct. 6–12, 1918: C
Do	Dec. 30–Jan. 25	25	11	10.
São Paulo	Mar. 3–9		1	
British East Africa:				
Mombasa	Sept. 1–Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22–28	1		
Do	Jan. 5–18	2		
St. John	Nov. 8–14	3		
Do	Jan. 26–Feb. 22	8		



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Colombo	Jan. 12–Mar. 15	3		
China:				
Amoy	Oct. 13–Dec. 28			Do.
Do	Mar. 11–Apr. 7	4	3	Jan. 4–Mar. 24, 1919: Present.
Antung	Feb. 10–16	1		
Do	Feb. 24–Mar. 2	1		
Canton	Nov. 17–23			Present.
Do	Feb. 9–15			Do.
Changsha	Mar. 16–23	3		
Chungking	Nov. 10–Dec. 28			Do.
Do	Jan. 5–Mar. 27			Do.
Foochow	Nov. 24–Dec. 28			Do.
Do	Dec. 29–Feb. 22			Do.
Hongkong	Dec. 15–21	1	1	
Do	Feb. 2–8	1		
Do	Feb. 16–Mar. 29	7	2	
Nanking	Dec. 1–28			Do.
Do	Dec. 29–Apr. 11			Do.
Shanghai	Jan. 20–26	1		
Tsingtao	Mar. 3–9	1		
Chosen (Korea):				
Chemulpo	Nov. 1–Dec. 31	15	4	
Do	Jan. 1–Feb. 28	15	6	
Fusan	Feb. 1–28	5		
Seoul	do	1		
Colombia:				
Barranquilla	Apr. 6–12		1	
Denmark:				
Copenhagen	Nov. 9–Dec. 28	12		
Do	Dec. 29–Mar. 15	69		
Egypt:				
Alexandria	Dec. 17–23	1	1	
Do	Jan. 22–Apr. 1	17	7	
Finland:				
Provinces				Jan. 1–31, 1919: Cases, 279.
Abo Och Björneborg	Jan. 1–31	47		
Kuopio	do	47		
Nyland	do	2		
St. Michael	do	51		
Tavastehus	do	4		
Uleaborg	do	1		
Vasa	do	1		
Viborg	do	126		
Provinces				Feb. 1–28, 1919: Cases, 234.
Abo Och Björneborg	Feb. 1–28	23		
Kuopio	do	54		
Nyland	do	15		
St. Michael	do	20		
Tavastehus	do	4		
Viborg	do	118		

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Dresden	Dec. 8–Feb. 15	247		26 additions
Halle	Dec. 8–Jan. 11	5		at Dresde
Hanover	do	7		Among inte
Königsberg	do	15		
Kottowitz	do	5		
Meyrode	do	6		
Riesa	do	4		District of D
Great Britain:				
Liverpool	Jan. 26–Mar. 15	7		Of these, 2 fr
London	Mar. 9–Apr. 19	7	1	
Greece:				
Saloniki	Feb. 2–15		3	
India:				
Bombay	Aug. 18–Dec. 28	35	8	
Do	Dec. 29–Mar. 8	269	104	
Calcutta	Sept. 29–Dec. 28		17	Report for w
Do	Dec. 29–Mar. 22		326	1918, missi
Karachi	Sept. 29–Dec. 28	13	4	
Do	Dec. 29–Mar. 22	107	41	
Madras	Oct. 5–Dec. 28	62	40	
Do	Dec. 29–Mar. 29	204	91	
Rangoon	Oct. 20–Dec. 21	32	6	
Do	Dec. 29–Feb. 22	386	135	
Indo-China:				
Anam	July 1–Oct. 31	146	67	
Cambodia	Aug. 1–Oct. 31	165	74	July 1–Oct.
Cochin-China	July 1–Oct. 31	400	112	deaths, 254.
Saigon	Oct. 7–Dec. 22	20	5	
Do	Dec. 30–Mar. 23	93	15	City and vici
Tonkin	July 1–Oct. 31	20	1	
Italy:				
Andria	Mar. 10–16	1		Province of B
Barletta	Mar. 3–9	2		Do.
Lecce (Province)	Feb. 17–23	2		
Genoa	Jan. 9–Mar. 15	4	2	
Messina	Mar. 2–23	3		Cases reporte
Naples	Mar. 10–16	2		ties in Prov
Palermo	Jan. 31–Apr. 1	30		
Turin	Jan. 27–Mar. 2	8	2	
Japan:				
Kobe	Oct. 26–Dec. 28	186	46	
Do	Dec. 29–Mar. 22	499	165	
Nagasaki	Mar. 31–Apr. 6	3		
Nagoya	Mar. 2–15	2		
Taihoku	Jan. 15–Mar. 18	146	18	Island of For
Yokohama	Jan. 20–26	1		
Java:				
East Java				Oct. 7–Dec. 3
Surabaya (district)	Oct. 7–Dec. 31	16		deaths, 1. J
Do	Jan. 1–Feb. 25	4	2	Cases, 4; dea
Mid-Java				Sept. 25–Dec. 1
				deaths, 3.
				Case, 1.
West Java				Oct. 2–Dec. 11
Batavia	Oct. 2–Dec. 11	185	151	deaths, 263.
Do	Dec. 27–Feb. 27	41	25	Feb. 27, 1
				deaths, 43.
Lithuania				Sept. 1–Oct. 1

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Philippine Islands:				
Manila	Nov. 2–16	5	3	
Do	Dec. 29–Apr. 12	40	21	Varioloid, 16.
Portugal:				
Lisbon	Nov. 16–Dec. 28	843		
Oporto	Mar. 9–Apr. 12	85	49	
Portuguese East Africa:				
Lourenco Marques				July 1–Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1–3	4		
Do	Jan. 17–23		1	
Do	Feb. 1–Mar. 15	16	1	
Spain:				
Barcelona	Jan. 9–Feb. 11		5	
Do	Feb. 19–Apr. 9	2	2	
Bilbao	Jan. 1–Feb. 20	6		
Cadiz	Oct. 1–Dec. 31	18		
Do	Jan. 1–Feb. 28		26	
Madrid	Sept. 1–Oct. 31	153		
Do	Jan. 1–Feb. 28		74	
Seville	Nov. 1–Dec. 31		8	
Do	Jan. 1–Feb. 28		4	
Valencia	Nov. 10–Dec. 21	40	9	
Do	Dec. 29–Jan. 25	93	10	
Do	Feb. 16–Mar. 15	215	19	
Straits Settlements:				
Penang	Oct. 6–12	1		
Singapore	Feb. 2–22	3		
Sweden:				
Stockholm	Feb. 2–8		1	
Union of South Africa:				
Cape Town	Aug. 1–30	1		
Do	Dec. 21–Jan. 31	1		
Johannesburg	Aug. 1–Oct. 31	12		Nov. 1–30, 1918: Cases, 4.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1–30	1		
Austria-Hungary:				
Austria				Dec. 1, 1918–Jan. 11, 1919: Cases, 125. Jan. 12–Feb. 8, 1919: Cases, 157.
Vienna	Dec. 1–Jan. 11	110		Occurring almost exclusively in repatriated soldiers and their contacts.
	Jan. 12–Feb. 8	119		
Hungary	Sept. 2–8	2		Sept. 9–Nov. 26, 1918: Cases, 110; deaths, 8. Nov. 27, 1918–Jan. 12, 1919: Cases, 210.
Budapest	Sept. 9–Nov. 26	73	2	
Do	Nov. 27–Jan. 12	159		
Pressburg	Sept. 9–Nov. 26	11	1	
Tyrnau	Nov. 4–26	1		
Szatmarnemeti	do	1		Present, county of Bihar.

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				and mostly 20-Nov. 7, deaths, 1.
Finland:				
Provinces—				
Abo Och Björneborg	Jan. 1-31	24		
Do	Feb. 1-28	19		
Nyland	do	10		
France:				
Marseille	Mar. 1-31		31	Apr. 26, 1919, and 2 milita
Germany:				
Breslau	Sept. 29-Oct. 19	12	8	
Gumbinnen district	Oct. 20-Nov. 7	1		
Dresden	do	1		
Griefswald	do	1		
Godullahutte	do	1		
Königsberg	Sept. 29-Oct. 19	3	1	
Königshutte	Oct. 20-Nov. 7	1	1	
Magdeburg	do	2		
Mostalten	Sept. 29-Oct. 19	7	2	District of Alle
Oppeln district	Oct. 20-Nov. 7	5		
Great Britain:				
Cork	Feb. 2-22	4		
Glasgow	Dec. 22-28	5		
Do	Jan. 5-Feb. 8	9	1	
Do	Mar. 9-15	1		
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-Feb. 15		78	
Italy:				
Bari	Feb. 3-9	19		In soldiers retu
Naples	do	3		Sea.
Taranto	do	2		Do.
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-Apr. 13	31	5	
Java:				
East Java				Oct. 7-21, 1918:
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 16
West Java				Oct. 2-23: Cases,
Batavia	Oct. 2-23	15	4	
Lithuania				Sept. 1-Oct. 26, deaths, 26.
Macedonia:				
Drama	Mar. 17			Present.
Epirus	Mar. 21			Do.
Kavala	Mar. 17	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5-Dec. 27	2		
Do	Dec. 28-Jan. 31	4		

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	....do....	111	13	
[illegible]	Mar. 24			
Oporto	Mar. 8–Apr. 12	432		
Russia:				
Archangel	Jan. 15–Mar. 15	233	61	
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1–Dec. 30	43		
Do	Jan. 17–Mar. 15	143	15	
Spain:				
Huelva	Oct. 1–31		2	
Madrid	Dec. 1–31		1	
Ukraine				Apr. 5, 1919: Reported to be spreading.
Union of South Africa:				
Port Elizabeth	Sept. 14–28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Bahia	Jan. 12–Mar. 1	5	2	
Pernambuco	Oct. 1–Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29–Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1–30	1		
Do	Mar. 1–15	1		
Catarama	Feb. 1–15	1		
Chobo	Jan. 1–15	1		
Daule	....do....	1	1	
Duran	Nov. 1–Dec. 31	3	2	
Do	Jan. 16–Mar. 15	5	1	
Guayaquil	July 1–Dec. 31	326	177	
Do	Jan. 1–Mar. 31	124	68	
Hacienda Vainilla	Feb. 16–28	1		
Milagro	Nov. 1–15	1		
Do	Feb. 1–Mar. 15	2	1	
Naranjal	Nov. 1–15	1	1	
Do	Jan. 1–15	1	1	
Naranjito	Nov. 1–15	1	1	
Do	Jan. 1–Feb. 28	2	2	
Payo (Hacienda)	Nov. 1–15	1		
Punta de Piedra	Nov. 1–30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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JBLIC HEALTH REPORTS

34 JUNE 6, 1919 No. 23

ACTIVITIES OF THE UNITED STATES PUBLIC HEALTH SERVICE.[1]

AMIN S. WARREN, M. D., Assistant Surgeon General, and CHARLES F. BOLDUAN, M. D., Chief, Section of Public Health Education, United States Public Health Service.

describing the activities of the United States Public Health e, so far as they were directly related to the prosecution of the t may be well to record that though many of these activities ıot undertaken until 1918, developing as they did out of neces- arising as the war progressed, the need for most of them was ɜn by the service, and was made the subject of official recom- ıtions. Thus, in a report dated February 4, 1917, two months the entry of the United States into war, a board of officers of nited States Public Health Service formulated a program of ies which could be undertaken by the service in order to assist prosecution of the war. Among these are mentioned:

he sanitation of ports and places within the United States in order to prepare them for camps of mobilization, concentration, or training for the Army or Navy.

ıe sanitary supervision of mobilized industrial forces.

edical and surgical relief to sick, wounded, or disabled soldiers and sailors at relief stations of the service.

edical and surgical relief to mobilized industrial workers.

ıboratory operations, including both research and manufacture of serums and vaccines.

was supplemented by a memorandum, dated April 7, 1917, ng desirable activities of the United States Public Health in the field of industrial hygiene, especially as related to lustries.

as clear that the carrying out of the contemplated war activi- manded a considerable increase in the personnel of the Public Service. In order that such an enlargement of the personnel ɜubsequently be available for other public health emergencies ɜs was asked to authorize the establishment of a reserve in the Health Service, to consist of medical officers, sanitarians, ɜrs, and other qualified experts.

[1] Reprinted, by permission, from the Medical Record, May 24, 1919.

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In the early part of 1918 it became evident that a number of different Government agencies were undertaking what were really Federal public health functions. It was realized that unless some plan of effective coordination was devised, there would be much duplication and waste of effort in this important field.

Under these circumstances, very soon after the passage of the Overman Act, the Public Health Service initiated action looking toward bringing all Federal civil health functions under the supervision and control of the Public Health Service. An Executive order effecting this was signed by the President on July 1, 1918. The text of this was as follows:

Whereas, In order to avoid confusion in policies, duplication of effort, and to bring about more effective results, unity of control in the administration of the public health activities of the Federal Government is obviously essential, and has been so recognized by acts of Congress creating in the Treasury Department a Public Health Service, and specially authorizing such service "to study the diseases of man and the conditions influencing the propagation and spread thereof" and "to cooperate with and aid State and municipal boards of health":

Now, therefore, I, Woodrow Wilson, President of the United States, by virtue of the authority vested in me as Chief Executive, and by the act "authorizing the President to coordinate or consolidate executive bureaus, agencies, and offices, and for other purposes, in the interest of economy and the more efficient concentration of the Government," approved May 20, 1918, do hereby order that all sanitary or public health activities carried on by any executive bureau, agency, or office, especially created for or concerned in the prosecution of the existing war, shall be exercised under the supervision and control of the Secretary of the Treasury.

This order shall not be construed as affecting the jurisdiction exercised under authority of existing law by the Surgeon General of the Army, the Surgeon General of the Navy, and the Provost Marshal General in the performance of health functions which are military in character as distinguished from civil public health duties, or as prohibiting investigations by the Bureau of Labor Statistics of vocational diseases, shop sanitation, and hygiene.

(Signed) WOODROW WILSON.

THE WHITE HOUSE, July 1, 1918.

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fore taking up the war activities of the Public Health Service
re detail, it may be well to point out that much of the work of
ervice in dealing with the pandemic of influenza in the fall of
was imposed on the service because of the entry of more than
) physicians practicing in the United States into military
e. With the spread of the pandemic over the United States
t calls were addressed by stricken communities to the Public
h Service for medical assistance. In response to this the
: Health Service organized a mobile corps of nearly 1,100
ians and detailed these to render the needed medical attention.
mergency expenditures required for this and other purposes in
g with the pandemic were met by a special appropriation of
),000 voted by Congress on October 1, 1918.

lescribing the war activities of the United States Public Health
e, it may be well to consider these under the following heads:

anitation of extra-cantonment areas.
ndustrial hygiene.
cientific research.
roduction and supervision of biological products.
ampaign against venereal diseases.
edical and surgical relief.
iscellaneous activities.
ublications of the service.

Sanitation of Extra-Cantonment Areas.

guration and organization of the work.—With the outbreak
war it began to be realized that the backward state of public
administration throughout a large part of the United States
ned to constitute a distinct handicap to the country's military
eness. It was felt that this handicap could be materially
l only by an intensive system of Federal health supervision
about zones surrounding military camps and important
ial centers engaged in war work (mines, munition plants,
ds). Within the camps themselves responsibility for the sup-
and control of sanitary matters rested with the Army Medical
their jurisdiction, however, ended with the camp boundaries
e Public Health Service was responsible for the correction
itary conditions which menaced them from without.

e summer of 1917, in cooperation with the Army authorities
te and local health officers, the Public Health Service under-
sanitate a zone around each of the 26 military cantonments;
of 1918 saw 47 zones, most of them around military can-
ts, under the operation of the Public Health Service. In
stances the officer of the service who was in charge of a zone
ointed by the State and local health authorities a deputy

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health officer. Inasmuch as the intensive health work was carried on primarily for the protection of the military forces and of industrial workers engaged in essential war work, it was manifestly unjust to ask the local communities to bear the entire expense involved. In the circumstances most of the work was done with Public Health Service sharing the expenses. Moreover, as described below, the American Red Cross maintained a number of sanitary units which rendered invaluable aid in the sanitation of these areas.

At the same time it was felt that the intensive health work carried on as a war measure should be made to constitute really a demonstration of profitable health activities and that every effort should be made to have the local and State health authorities continue the work after the war emergency had passed. To this end it was the aim to rouse a wider interest in health matters, to present the cost and the results of health work in the form of simple statements published in the local newspapers, to invite public attention to attainable results as shown by the experience of other communities—in short to seek in every way to make the people realize that "public health is purchasable."

American Red Cross.—It is certain that the work of the Public Health Service, especially as it related to the sanitation of extra-cantonment and industrial areas, was greatly facilitated by the effective aid rendered by the American Red Cross. At the request of the Surgeon General the War Council appropriated funds, and authorized sanitary units to be operated in such areas under the direction of officers of the Public Health Service. The first of these units was organized at Columbia, S. C., and by the end of the following year, January 1, 1919, 36 such units were in operation.

A Red Cross sanitary unit consisted of one or two bacteriologists, a chief sanitary inspector and a number of sanitary inspectors, a supervising public health nurse with the required number of assistants, clerks, stenographers, and laboratory assistants, and miscellaneous employees such as laborers, messengers, etc.

In addition to the salaries of these employees the Red Cross paid their traveling expenses, including, where necessary, the service of automobiles, and it also provided limited funds for sanitary necessities of the poor. The direction of the work of the sanitary unit was always lodged in an officer of the Public Health Service. Moreover, a general supervision over the work of the various Red Cross units was exercised by a senior officer of the United States Public Health Service, detailed to Red Cross headquarters as liaison officer.

Cooperation of State and local health authorities.—Without the cooperation on the part of the State and local health authorities it would have been impossible to carry on the intensive health activities dealing with the sanitation of extra-cantonment areas. In

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y instances this work was supported by funds supplied by State local authorities. Such support was often invaluable because ıe legal limitations on the character of expenditures by the ral health authorities. In addition to this, officers of the ic Health Service detailed to extra-cantonment areas were lly given appointment as deputy health officers by the State ocal authorities, thus arming them with the necessary authority dminister health regulations. It was often discovered that ations were lacking to provide the desired control. In these model regulations prepared by the Public Health Service were ımended and were usually adopted by the proper local authori-

ivities carried on.—The work done in the sanitation of the already mentioned has been of endless variety: In some rural it has consisted largely of measures designed to control the d of malaria; in others, of efforts to provide proper disposal of n excreta, to protect drinking water, and to safeguard the supply; in urban communities, the home of important war tries, questions of sanitary housing, of the control of com- :able diseases, of industrial hygiene demanded a large share of :ion.

ne idea of the magnitude of this undertaking can be gained the following list of places where this intensive health super- was maintained:

EXTRA-CANTONMENT ZONES.

wing is a list of the extra-cantonment areas where the Public Health Service on intensive health supervision, and where Red Cross sanitary units were d:

lexandria, La.	Sanitary unit No. 22.
lexandria, Va.	Sanitary unit No. 31.
mericus, Ga.	Extra-cantonment zone only.
merican Lake, Wash.	Sanitary unit No. 18.
nniston, Ala.	Sanitary unit No. 8.
tlanta, Ga.	Sanitary unit No. 11.
ugusta, Ga.	Sanitary unit No. 25.
yer, Mass.	Sanitary unit No. 10.
runswick, Ga.	Extra-cantonment zone only.
harleston, S. C.	Sanitary unit No. 33.
harlotte, N. C.	Sanitary unit No. 20.
hattanooga, Tenn.	Sanitary unit No. 16.
hillicothe, Ohio.	Sanitary unit No. 12.
olumbia, S. C.	Sanitary unit No. 1.
olumbus, Ga.	Extra-cantonment zone only.
es Moines, Iowa.	Sanitary unit No. 4.
l Paso, Tex.	Sanitary unit No. 24.
ayetteville, N. C.	Sanitary unit No. 35.
lorence, Ala.	Extra-cantonment zone only.
ort Worth, Tex.	Sanitary unit No. 23.

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Gulfport, Miss.	Extra-cantonment zone only.
Greenville, S. C.	Sanitary unit No. 13.
Hattiesburg, Miss.	Sanitary unit No. 6.
Houston, Tex.	Sanitary unit No. 27.
Jacksonville, Fla.	Sanitary unit No. 29.
Lawton, Okla.	Sanitary unit No. 34.
Leavenworth, Kans.	Sanitary unit No. 5.
Lake Charles, La.	Extra-cantonment zone only.
Louisville, Ky.	Sanitary unit No. 3.
Little Rock, Ark.	Sanitary unit No. 2.
Millington, Tenn.	Extra-cantonment zone only.
Macon, Ga.	Sanitary unit No. 14.
Manhattan, Kans.	Sanitary unit No. 15.
Montgomery, Ala.	Sanitary unit No. 19.
New London, Conn.	Sanitary unit No. 32.
Newport News, Va.	Sanitary unit No. 9.
Petersburg, Va.	Sanitary unit No. 7.
Portsmouth, Va.	Sanitary unit No. 28.
Portsmouth, N. H.	Sanitary unit No. 30.
Pensacola, Fla.	Extra-cantonment zone only.
Raleigh, N. C.	Extra-cantonment zone only.
San Antonio, Tex.	Sanitary unit No. 26.
Seattle, Wash.	Extra-cantonment zone only.
Spartanburg, S. C.	Sanitary unit No. 17.
Tacoma, Wash.	Extra-cantonment zone only.
Waco, Tex.	Sanitary unit No. 21.
West Point, Miss.	Extra-cantonment zone only.
Wilmington, N. C.	Extra-cantonment zone only.
Washington, D. C.	Sanitary unit No. 26.
Wrightstown, N. J.	Sanitary unit only.

The organization built up to deal with the sanitation of extra-cantonment areas dovetailed into the existing local health machinery, thus making up a complete sanitary unit. The amount and character of the work done by the United States Public Health Service therefore varied, in the different areas, according to the amount and character of the work which State, city, county, or other local health authorities were willing and able to do. Altogether the end of the year 1918 found 49 commissioned medical officers and 72 acting assistant surgeons engaged in this work by the United States Public Health Service. These, with sanitary engineers, scientific assistants, epidemiologists, sanitary inspectors, and public health nurses, made up a total force of over 500, exclusive of laborers.

Following is a more detailed description of the activities carried on to sanitate these special areas:

Malaria control.—In general it has been the aim of the Public Health Service to establish around each cantonment a mile-wide belt entirely free from mosquito-breeding places. The means to attain this has varied with the local conditions. In some instances extensive swamp areas have been ditched and drained, in others

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gish water courses have been channeled and straightened, here l ponds have been drained dry, there they have been filled in; till other cases they have been oiled. Now and then it was ble to poison mosquito-breeding waters by turning into them strial wastes.

together, the total area in and about camps and war-industrial nunities which was thus treated to prevent the breeding of quitoes was over 1,200 square miles. The total cost of the work $1,300,000, of which approximately 35 per cent was obtained y. Nearly 2,500 miles of ditches were dug and the population cted by these measures was 1,730,000 civilian population and erage of 826,000 military population.

strative of the operations carried on it may be mentioned at Park Field, near Memphis, about half of the work consisted grading and clearing natural water courses. The total area ed was 16 square miles, and the total cost was $65,000.

other areas, especially where the soil was free from roots, the osquito work consisted largely of cutting V-shaped ditches a horse plow. Such ditches were from 18 to 25 inches deep bout 2½ to 3 feet in width at the top. Much of the work at omery, Ala., was of this type. There, approximately 86 miles were protected at a cost of $45,000, involving the cut- f 123 linear miles of light ditches.

still other areas it was necessary to cut and clean an outlet to mp and to secure good drainage of such camps when water were favorable. This often involved heavy operations, even ing blasting with dynamite. The costs have varied considerably ling on local conditions. Operations of this kind were carried Macon, Ga. They protected an area of 26 square miles, involved tting of 50 linear miles of ditches, and cost $107,000. Similar vas carried on at Hattiesburg, Miss.

ral sanitation.—Under this head are embraced a number of activities having to do largely with the correction of the ary environment of the rural population usually in a zone to 5 miles wide around the military cantonments. Much of rk consisted in the improvement of local water supplies and vision for the safe disposal of human excreta. In connection ie latter, in some communities the double-compartment con- ault type of privy was largely introduced; in others, sanitary ombined with scavenger system were utilized. In all cases on was given to preventing the spread of diseases of excretal by flies.

ination.—In order to reduce to a minimum the prevalence of ox and typhoid fever in the extra-cantonment areas much is was placed on protective vaccination. Smallpox and

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typhoid vaccines prepared by the Hygienic Laboratory were administered by officers of the Public Health Service. The extent of this activity is indicated by the following figures showing total vaccinations in the extra-cantonment areas:

Antityphoid inoculations	239,888
Smallpox vaccination	107,497

Morbidity reports.—With the inauguration of the intensive health work in the extra-cantonment areas, the possibility was presented of securing more complete morbidity reports than had previously been received from any miscellaneous group of the population. Arrangements were accordingly made to secure the following regular reports:

1. Daily morbidity reports, mailed to the Public Health Service.
2. Weekly telegraphic reports, for publication in "Public Health Reports."
3. Records of individual cases of illness, showing diagnosis, age, sex, color, occupation, date of onset, and termination of the disease.

One of the important outcomes of the collection of these morbidity reports was the possibility of currently transmitting the information thus obtained to the medical authorities of the Army and Navy and the Council of National Defense. Accordingly, daily statements were prepared for this purpose containing the following:

1. Transcripts of monthly reports from collaborating epidemiologists and State health officers. (This information was thus available to the military authorities prior to publication in "Public Health Reports.")
2. Transcripts of the daily health reports from the extra-cantonment areas.
3. Transcripts of weekly postal card morbidity reports from the larger cities.
4. Information of unusual or immediate importance relative to the prevalence of disease.

Health education.—Much of the work in the extra-cantonment areas was necessarily educational, and was carried on largely by personal visits to the individual homes by public health nurses or sanitary inspectors. At these visits attention was called to matters relating to child hygiene, to the importance of cleanliness and the proper disposal of human excreta, the need of pure water and milk supplies, the rôle of flies in the transmission of disease, the recognition and prevention of communicable diseases, the control of mosquito breeding, and any other matters of special importance to the particular home visited.

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hoid-fever index.—Among the different statistical indices in use itarians for measuring the results of public health activities, evalence of typhoid fever has generally been accepted as , useful, and reliable. Omitting those extra-cantonment areas were not established until after the beginning of 1918, the care- llected morbidity reports from these areas show a total of 2,835 f typhoid fever, in 31 areas having a total population of at ,033,000. This is equivalent to a morbidity rate of 93.5 per) population, and an estimated mortality rate, according to al method of calculation, of 9.35 per 100,000 population.

rate may fairly be compared to the typhoid fever rate of the States registration area, which was 13.3 in 1916 (the latest available). As a matter of fact the results achieved were ore favorable, for inasmuch as most of these extra-cantonment ere located in the South, the comparison should really be vith the typhoid rate of that part of the country. Such a ison has been made in the following tabulations:

Typhoid death rates per 100,000.

).....	19.2	Extra-cantonment areas (1918).....	11.0
16).....	22.0	Extra-cantonment areas (1918).....	7.6
16).....	25.1	Extra-cantonment areas (1918).....	9.8
ina (1916).....	34.1	Extra-cantonment areas (1918).....	7.2
917).....	38.0	Extra-cantonment areas (1918).....	15.1

ether, the conclusion is warranted that the public health s carried on in the extra-cantonment areas resulted in a improvement in sanitary conditions and a consequent high f health protection not only to the people living in these areas hose in the military and industrial camps there located.

ria index.—It may be mentioned that malaria, which was a potential disability factor about many of the camps, especially ated in the South, was practically eliminated from the soldier on and only 3,160 cases were reported to the Public Health during the malarial season of 1918 from among the civil on of three and three-quarter million, a rate of 83 per 100,000. ich data as are obtainable from previous years this was a ous reduction in the malarial rate in these communities. sults may well be compared with those in Panama, especially y were obtained, not under military conditions but through ntary work of a civil population.

Industrial Hygiene.

portant contribution to promoting efficiency in war indus- sisted in the health and sanitary supervision of these industries ublic Health Service.

peration with the Safety and Sanitation Division of the l Service Section of the Ordnance Department, officers of

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the Public Health Service conducted examinations as to the hygienic conditions of the explosives industry in such plants as—

The Etna Explosive Co., Mount Union, Pa., and Emporium, Pa.
The Atlas Powder Co., Webster, Pa., and Perry Point, Perryville, Md.
McArthur Bros.' Bag Loading Co., Woodbury, N. J.
Nitrate Plant No. 2, Muscle Shoals, Ala.
Penn Trojan Powder Co. and Chemical Co, Allentown, Pa.
Picric Acid Plant, Brunswick, Va.
Quaker Valley Works of John B. Semple Co., Sewickley, Pa.
Roessler & Hasslacher Chemical Co., Perth Amboy, N. J.
Tullytown Bag Loading Co., Niagara Falls, N. Y.
U. S. Explosives Plant, No. 6, Nitro, W. Va.
U. S. Nitrate Plant, Toledo, Ohio.
Western Cartridge Co., West Alton, Ill.

Particular attention was paid to the subjects of T. N. T. poisoning and poisoning from other comparatively new similar chemicals and explosive compounds. Laboratory work incident thereto was done by the Hygienic Laboratory and the National Research Council.

The Public Health Service also conducted investigations of the sanitary condition of a number of large aniline and other chemical factories; the electro-chemical industry of Niagara Falls, as well as the storage battery and abrasive industries.

Surveys were also made of health conditions of establishments manufacturing uniforms and other articles of clothing equipment for the United States Army, mostly in the State of Ohio.

The demonstration at Nitro, W. Va.—On the theory that the Government should take the lead in demonstrating how to safeguard the health of industrial workers, arrangements were made at the request of the Secretary of War to have the United States Public Health Service undertake the sanitation and medical and surgical relief at the United States explosives plant located at Nitro, W. Va. Some idea of the magnitude of the work thus undertaken by the Public Health Service may be gained from the fact that it required the services of 35 medical officers, 80 nurses, and numerous other persons including laborers, artisans and clerks. The total personnel was about 500, not including laborers in the sanitary department, who numbered approximately 300.

Inasmuch as the sanitary and medical work began with the construction of the plant, the work at first had to do largely with the health supervision of the large army of temporary employees engaged in construction work; subsequently, as this phase of activity subsided, matters of industrial hygiene arising with the operation of the plant required an increasing amount of attention. A brief summary of the more important phases of this work may be of interest.

Examination of applicants for employment.—A suitable building was erected and properly fitted out, both in supplies, equipment, and personnel, for the purpose of examining physically all applicants

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loyment. In this way it was possible to control the intro- of dangerous communicable diseases and to reject for employ- hose disqualified by disease or physical defects. Out of the applicants examined to July 1, 1918, only 0.8 per cent were ently rejected for employment. In addition to this 1.8 per re rejected temporarily. Most of the latter were cases of l disease, and the infected individuals were referred immedi- the proper department for treatment. In most cases as soon were under proper medical treatment these persons were work. In this way the labor supply was conserved and the e not refused the opportunity to earn a living because of their iate infection. Of the total number of applicants accepted loyment 11 per cent had marked physical disabilities, such ts of sight, of hearing, of loss of fingers or of entire limbs. oper attention to the placing of these individuals, practically ference with efficient labor resulted.

ring.—As a result of the physical examination, 1,690 indi- were discovered to be infested with lice. The infested men nporarily placed in a detention barracks, and then sent the delousing house. Here they were subjected to a cleans- n, medical inspection, and treatment. In the meantime, thing was run through the sterilizer. Their bed clothing was n a small air-tight building and subjected to cyanide fumiga-

interest to note, however, that in spite of most rigid inspec- treatment, cases of pediculosis constantly escaped notice, covered at a later date.

ation and typhoid inoculation.—At the time of enrollment the e vaccinated against smallpox and were also encouraged to yphoid inoculation. By means of the persistent health da carried on, it has been possible to spread the knowledge lue of these measures among those employed at this plant result that 116,668 persons have received the prophylactic inoculation, and 76,920 persons smallpox vaccination. the many changes among the people employed at the plant, t possible to complete the course of treatment in many of es of typhoid inoculation. By far the great majority who at the plant have completed this treatment.

e of Housing.—During the period of construction practically s engaged at the plant were housed in barracks similar to l by the Army during mobilization. These barracks number re 160 feet in length by 48 feet in width and 18 feet high, 7,680 square feet of floor space and 69,120 cubic feet of air to . They are two stories in height, with 34 regulation win- ither side and 12 on the ends. They are equipped with 100 ck iron beds on the second floor, and 50 double-deck iron

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beds on the first floor, one-half of the first floor being used as a recreation room. These barracks house 300 men each. Twenty bunk houses, 120 feet long by 24 feet wide and 8 feet high, also offer facilities for sleeping quarters of the laborers. These are likewise equipped with double-deck beds.

Between each barracks building and bunk house is a bath house connecting with the barracks by a covered passageway.

Bungalow housing.—Various employees, mostly administrative officers and office force, were housed in the bungalow section apart from the barracks section. The total number living under these conditions was relatively small at first, numbering possibly 1,500 persons, but later increased to approximately 10,000.

Medical and surgical relief.—Four six-bed emergency dressing stations were constructed in connection with the plant. In addition to this there was a 40-bed emergency hospital, an 80-bed isolation hospital, a 325-bed general hospital, and a dispensary in the bungalow section; the last named was for handling bungalow visits and giving dispensary service to the bungalow occupants. In addition to the relief of those actually ill or injured, medical relief was given those afflicted with disabilities, and to constructive and repair work in connection with eye, ear, nose and throat and dental affections.

Sanitation.—The problem of sanitation required both temporary and permanent measures. Under the former are embraced the measures taken to provide a safe disposal of excreta of the many thousand employees engaged in the construction of the plant; to maintain in sanitary conditions the stables for the several thousand horses and mules used in construction work; the provision of pure drinking water; the disposal of rubbish and garbage; the maintenance of sanitary kitchen and mess halls; inspection of all food—in short, such matters of general sanitation as generally arise in the maintenance of a large construction camp. Under the temporary measures, in order to furnish a safe water supply, a small chlorinating plant was installed, and several deep wells were drilled. From these water was delivered to the whole plant. Under the permanent sanitary measures may be enumerated provision of a safe water supply; construction and maintenance of an adequate sewerage system and sewage disposal; inauguration of a system of street cleaning, including garbage and refuse collection and disposal; establishment of a system of food supervision.

A permanent water system was installed with necessary filters to supply a city of 35,000 population, and chemical and bacteriological analyses of this water were made daily in the laboratories at the hospital.

All food entering the plant was shipped to the commissary warehouses and refrigerating plant, and there inspected by the food

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tors, and likewise again inspected in the commissary stores and alls before being consumed.

pational health hazards.—The gradual completion of the plant ed the inauguration of the industrial operation for which the was established; that is, the production of smokeless powder. f the health hazards met with during operation are as follows: and sulphuric acid burns, caustic alkali burns, the inhalation of and sulphuric fumes and of chlorine, excessive heat and ty, alcohol and ether intoxication, poisoning by diphenylamine, rns from a flare or sudden burning of powder. In order to these hazards an educational campaign was conducted by l officers instructing the workmen in the dangers and the first-aid nt to be employed. One hundred and twenty-five stretcher containing each one stretcher and one blanket, were scattered the plant, being easily accessible to those who might be , and the nearness of the field emergency stations made it to render medical service almost immediately upon the nce of an accident. Three motor ambulances were stationed emergency hospital, having free access to all parts of the ion. First-aid boxes were installed in all places deemed le for immediate relief, and shower-bath facilities were in- n the acid area for bad acid burns.

Scientific Research.

trial fatigue.—With the necessity imposed by the war to its industrial operations at the highest possible degree of y, the Public Health Service at once became vitally interested lation of industrial fatigue to efficiency. In cooperation with sional committee on industrial fatigue of the Council of l Defense, the Service in the summer of 1917 began an ex- nvestigation of this important health problem.

a considerable number of factories were visited, detailed were limited to two large establishments which offered nal opportunities for observation. One of the main objects was the determination of the conditions under which the es, the human machines of the factory, can perform their h the highest degree of efficiency. The subjects considered output, night work, effect of recess periods, accidents, and gical tests for fatigue. A summary of the results of these was published in the annual report of the Public Health or the fiscal year ending June 30, 1918.

otoluol poisoning.—At the Hygienic Laboratory systematic were commenced in regard to the methods of absorption, , and prevention of trinitrotoluol poisoning. These studies cted to be of great assistance in providing sanitary require- hich will minimize the danger from trinotrotoluol, a sub-

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stance which is used principally as a charge in high-explosive shells. The manufacture of trinitrotoluol is surrounded with considerable risk of poisoning.

The investigation related to:

1. Simple diagnostic tests for the recognition of early poisoning.
2. A preventive skin wash for the efficient removal of T. N. T.
3. The relative importance of absorption of the poison through the skin and the respiratory passages.
4. The prophylactic value of proper diet.
5. The incidence of poisoning in one of the larger shell-loading plants.

Nutritive value of various kinds of flour and bread.—At the Hygienic Laboratory an extensive investigation covering a period of nearly two years has shown that highly milled flour and bread made from this flour are considerably inferior in vitamine content to the "low extraction" flours now so extensively used in European countries. This conclusion was reached from well-planned feeding experiments on animals, in which all extraneous and complicating factors were eliminated. One of the main objections against the "low extraction" flour, namely, its excessive cellulose content, could easily be overcome by a method of milling which would permit the elimination of a greater part of the bran.

Influence of heat on the vitamine content of beef.—Another investigation bearing quite directly on war matters was one carried on by the Hygienic Laboratory to determine whether the canning process robbed meat of the so-called vitamine present in fresh meat. The work has conclusively shown that under ordinary conditions beef does not lose any of its vitamine content when heated for three hours to 120° C.

Studies on dermatitis from mercury fulminate and parazol.—At the request of the Ordnance Department of the Army and of the United States Navy an investigation was undertaken to devise means of preventing the severe dermatitis which results from mercury fulminate and parazol respectively. A protective skin varnish against parazol was developed.

Antitoxin against gas gangrene.—The Hygienic Laboratory was called upon to prepare and standardize an antitoxin against gas gangrene. Considerable work on gas gangrene has been done by investigators abroad, but no definite results have been obtained. The studies conducted by the Hygienic Laboratory resulted in a method of standardization for perfringens antitoxin for gas gangrene.

Laboratory studies on arsphenamine.—Up to the time of the outbreak of the war, arsphenamine (salvarsan) was exclusively manufactured in Germany and was protected by patents in most countries.

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esult of the war the supply in the United States was seriously d, particularly on account of the blockade, which made it ible to secure enough of the German product. In 1916 a ivate institutions began the manufacture of arsphenamine in ited States, under an agreement with the Farbwerke Hoechst e German holders of the patent in this country. Soon after laration of war by the United States the patent on salvarsan spended and the Federal Trade Commission was authorized gress to issue licenses for the manufacture and sale of the The manufacture of arsphenamine is extremely difficult and very often in a product of high toxicity which is dangerous ife of the patient. Hence it is absolutely essential to control mmercial product by proper toxicity tests before the drug is l for sale to the medical profession. These circumstances e necessitated the adoption of a satisfactory method for this , and after considerable work such a method was developed. ds of toxicity for arsphenamine, submitted to the Federal ommission, were accepted and the manufacturer was required is product by means of the method developed at the Hygienic ory. This laboratory furthermore controlled the commercial by testing many hundred samples submitted by the manu- . In addition to the toxicological tests, chemical standards rked out so as to insure, as much as possible, uniformity in apeutic value of the drug.

vestigation was conducted into the process of manufacture enamine. The work was done at the Hygienic Laboratory, versity of Chicago, and at one of the larger plants where mine was produced. This led to marked improvement in lity of this particular brand of arsphenamine and removed us shortage of the drug at the beginning of the year 1918. lt of this work the Army and Navy were able to secure a t supply of the drug.

er phase of the arsphenamine work had for its purpose the ion of the untoward reactions sometimes following the ration of the drug to patients. It appeared particularly t to determine the causes of these reactions and to discover r their prevention and treatment. The work was divided

. study of the cause of the circulatory and respiratory reactions (nitritoid crises).

he study of arsphenamine nephritis. Considerable progress has been made on this subject and upon completion of the work it is hoped that certain definite recommendations will be available which will eliminate some of the disadvantages possessed by this drug and prevent the deaths occasionally resulting from its use.

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Miscellaneous laboratory examinations.—In connection with the rumors that many kinds of contaminations, poisons and glass were being introduced into food by enemy sympathizers, the Hygienic Laboratory examined specimens from suspicious cases submitted by officers of the Government. The specimens covered an exceedingly wide range of objects, such as candy, cakes, bread, pies, breakfast foods, and dried and preserved fruits. The most interesting of these specimens were those of court plaster, sent to the laboratory because it was suspected by the general public that German agents had introduced tetanus bacilli into the court plaster and then had peddled the plaster to the public. Thirteen samples of the suspected court plaster were examined and tetanus bacilli were found in two samples. This was so interesting that the laboratory deemed it advisable to go into these investigations more thoroughly. Accordingly, numerous samples of court plaster were purchased in drug stores in the open market and submitted to examination. The results showed that a number of the specimens contained tetanus bacilli and that the presence of these bacilli was due to insufficient sterilization of the gelatin used in the plaster.

Another interesting case was the appearance of anthrax in several cantonments among the users of new shaving brushes. Several soldiers who had purchased new shaving brushes developed anthrax with fatal results. The brushes which they used were submitted to the Hygienic Laboratory and the examination showed the presence of anthrax spores in the bristles. The manufacturers of the various brushes were communicated with and their cooperation was secured in solving this interesting problem. It appeared that the bristles used in the manufacture of shaving brushes are to a large extent imported from China. It further appeared that although the bristles were cleansed by ordinary scrubbing, they were not really sterilized. Under these circumstances it is readily seen that anthrax infection in an animal whose bristles were used for shaving brushes could be transferred to the user of the shaving brush. Regulations governing the sterilization of bristles used in the shaving brushes were prepared under the authority of the Interstate Quarantine Act.

Production and Supervision of Biological Products.

The entry of America into the war resulted in an enormous increase in the production and use of serums, toxins, and analogous products. As all manufacturers of these products are licensed by the Federal Government and as the law provides for the examination and control of the products and for the inspection of the manufactories, an immensely increased amount of work was thrown upon the Hygienic Laboratory. It was particularly necessary that every lot should be tested before being released for use in the Army or the Navy, as these

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ervices depended entirely upon the reports of tests made at nstitution. Promptness was an important factor. The out- of meningitis and pneumonia in the military camps was the for using vast quantities of specific sera for these infections. sera were standardized in the Hygienic Laboratory, and facturers were instructed to comply with these tentative ards.

order to help protect the military forces against typhoid fever lerable attention was devoted to the control and eradication of id infection from extra-cantonment areas. In this work ex- e use was made of antityphoid inoculations. The vaccine for urpose was prepared and furnished by the Hygienic Laboratory. s connection the following table will be of interest:

Production of typhoid vaccine.

r ending:	Cc. produced.
30, 1914	4,892
30, 1915	17,248
30, 1916	16,075
30, 1917	99,880
30, 1918	348,275
Dec. 1, 1918	612,908

ing the period of the war 1,102,812 cc. of bacterial vaccine istributed. This includes typhoid, paratyphoid, and the so- "triple vaccine." The manufacture of the last named was in 1917.

Campaign Against Venereal Diseases.

much as venereal infection had regularly exacted a heavy om military forces, and because experience had shown that urce of this infection was principally an infected civilian tion, the outbreak of the war naturally focused the attention ian health authorities on the control of venereal diseases to l that the military forces might be protected. Prior to the number of progressive States had begun to deal with this n, and in general the result of their activities had demon- a practicable plan by which health authorities might hope re some measure of control of the venereal diseases. There king, however, any nation-wide interest in this important problem, and, still more important, very little disposition on t of most State authorities to provide funds for anything hing an adequate plan of control.

ged as it is with the control and prevention of communicable spread from State to State, the Public Health Service that it had a definite responsibility in organizing an effec- npaign for the control of venereal diseases.

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Accordingly, through its Division of Domestic Quarantine, it outlined a plan whereby the Public Health Service would cooperate with State health authorities in effective antivenereal disease control. Briefly summarized, the plan provided for the appointment of an officer in each State to direct the work of venereal disease control. The salary of such officer, selected by the State health officer, was to be paid by the State and Federal Governments jointly. Each State was at once to provide for the notification of all cases of venereal disease, and to make provision for the extension of facilities for early diagnosis and treatment. Repressive measures, looking to isolation and treatment of dangerously infected individuals, and educational measures for the general public as well as for the infected persons, were also to be provided for.

Under the stimulus of the war emergency a considerable number of States accepted the plan of cooperation just outlined. Nevertheless it is certain that nowhere near the progress that actually has been made would have been made had it not been for the Federal financial aid given by the so-called Chamberlain-Kahn Act approved July 9, 1918.

Under the provisions of this act allotments were made to each of the various States. Such allotments were to be expended in accordance with the rules and regulations promulgated by the Secretary of the Treasury. These provide that approximately 50 per cent of the State's allotment is to be used in treatment of venereal diseases. 20 per cent for the educational work; 20 per cent for law enforcement; and 10 per cent for administration.

At the present time venereal disease clinics are being conducted in 28 extra-cantonment zones, and 112 in other locations. During the period of one year—1918—22,441 cases of venereal diseases were treated in the extra-cantonment clinics. These cases were divided as follows: Syphilis, 9,250; gonorrhea, 12,210; chancroid, 981. At each of these clinics a circular is handed to the patients, giving important confidential information in regard to syphilis and gonorrhea.

At the time of the second draft the Provost Marshal General of the Army requested the Public Health Service to carry on a campaign of education among the drafted men. Lecturers were appointed and nine regional supervisors were placed on the road to supervise the lecture work. Three million copies of the leaflet entitled "Come Clean" were printed and distributed to the men in class A.

The moving picture film "Fit to Fight" prepared by the Army Medical Department has been revised and the title changed to "Fit to Win" and is being shown before civilian audiences throughout the country.

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ircular letter was sent to all of the retail druggists in the United s (about 47,000) asking that they discontinue the sale of eal disease nostrums and cease counter-prescribing for venereal ions. A bulletin entitled "Responsibility of Druggists for the c Health" was also sent to each of these druggists.

ircular letter will soon be sent to all of the physicians in the d States, asking that they cooperate in the fight against vene- liseases. This is Venereal Disease Circular No. 35. Seventy nd copies of the Manual for the Treatment of Venereal Dis- are now in the hands of the printer and will be sent free of charge h physician that replies to this appeal.

e than 17,000 letters have been received by the bureau as a of the circular "War on Venereal Diseases to Continue." f this total number, only four contained adverse criticisms. the other letters received showed a deep interest and sympathy he movement for control of venereal diseases throughout the y.

owing is a list showing the allotments made under the pro- of the Chamberlain-Kahn Act. Each of the States has d the allotment, with the exception of those marked with a

a	$23,247.41	Massachusetts	$36,603.94
s	17,117.43	Nebraska	12,962.79
	2,221.95	*New Mexico	3,558.74
ia	25,851.07	Nevada	890.22
	8,687.79	North Dakota	6,274.30
icut	12,120.75	North Carolina	23,988.94
e	2,199.84	New Hampshire	4,681.62
of Columbia	3,598.72	New York	99,089.31
	8,182.47	Oregon	7,315.04
	28,368.95	Ohio	51,832.61
	3,540.19	Oklahoma	18,017.23
	29,366.62	*Pennsylvania	83,342.76
	61,308.38	Rhode Island	5,899.80
	24,194.56	South Dakota	6,348.61
y	24,898.14	South Carolina	16,476.95
	18,385.49	*Tennessee	23,755.21
a	18,008.89	Texas	42,367.08
	4,088.71	*Utah	4,059.33
	30,555.01	Virginia	22,415.90
a	22,569.18	Vermont	3,870.31
	35,808.43	West Virginia	13,277.22
l	14,084.18	Washington	12,416.85
pi	19,540.22	Wisconsin	25,370.06
	8,071.80	Wyoming	1,587.07

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War work of the marine hospitals.—The Executive order of the President dated April 3, 1917, made all marine hospitals of the Public Health Service available for the treatment of the enlisted personnel and officers of the Army and Navy whenever such treatment was requested by the proper military authorities. Of course the Army and Navy have their own hospitals, but it was expected that in many places where there is no regular military post or hospital, officers and enlisted men would be taken sick and require hospital treatment. In this way the marine hospitals practically acted as military hospitals in many cities. Notable examples of this are Savannah, Detroit, and Chicago. Besides Army and Navy personnel, civilian employees on vessels operated by the military authorities were admitted at many hospitals after the boats upon which they served had been torpedoed. This occurred especially at the marine hospital in Boston. Altogether, for the fiscal year ending June 30, 1918, there were treated at the United States marine hospitals and relief stations over 5,000 officers and enlisted men of the Army and Navy. Of this number approximately 1,000 were admitted to hospital for treatment, the remainder having been given treatment as out-patients in the dispensaries operated either in connection with the hospitals themselves or at other relief stations.

In addition to the foregoing, soldiers suffering from trachoma were admitted to some of the marine hospitals for treatment and in the majority of instances these were cured and returned to their respective commands.

Cooperation with Bureau of War Risk Insurance.—A direct outgrowth of the war activities of the Public Health Service is the plan to provide medical, hospital and sanatorium care for the beneficiaries of the Bureau of War Risk Insurance.

Already, with demobilization just begun, the War Risk Insurance Bureau has under medical treatment 1,724 beneficiaries (January 16, 1919).

Within a very short time hospital care will have to be provided for a considerable proportion of the 24,500 soldiers, sailors, and marines discharged from military service because of tuberculosis, and for the 50,000 cases of psychoneurosis, epilepsy, and other nervous and mental disorders reported among the military forces up to December 1, 1918. But this by no means exhausts the demands for hospital care which may be expected to be made upon the Public Health Service. According to the provisions of the war risk insurance act the Government is obligated to provide "such reasonable governmental medical, surgical and hospital services, and such supplies including artificial limbs, trusses and similar appliances as the

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or may determine to be useful and reasonably necessary."
pplication of such sick benefits is limited to illness contracted
of duty, and it is further provided that symptoms must have
red within a year after discharge from military service. In
to prevent the unnecessary duplication of hospital construction
rious bureaus and departments of the Federal Govermnent, the
tion was made that the hospitals in the present cantonments be
d for the care of beneficiaries of the war risk insurance. In a
ecently passed by Congress, certain cantonment hospitals,
er with the large and newly completed "Speedway" hospital
cago, are given over to the Public Health Service for the care
-risk patients. In addition to this the bill provides for the
shment of sanatoria for the tuberculous in various parts of the
y.

re is an advantage in having the hospital activities of the War
Insurance conducted by the United States Public Health
; both services are lodged in the Treasury Department, and
blic Health Service already maintains a well-organized hospital
which, by law, stands obligated to treat:

Merchant seaman.
Employees of the Mississippi River Commission.
The United States Coast Guard Service.
The United States Lighthouse Service.
Employees aboard vessels of the Engineer Corps of the United States Army.
The United States Coast and Geodetic Survey.
Injured civil employees of the United States, under the Federal compensation act.
Civil employees on Army transports.

Miscellaneous Activities.

ary engineering.—The sudden development of industrial
nd villages in connection with munition plants, shipyards, and
resulted in a considerable number of requests to the Public
Service for assistance in the solution of problems relating to
supply, sewage disposal, and the like. Some idea of the
er of the activities thus carried on by the service may be
rom the following examples:

citizens of Nashville, Tenn., became somewhat alarmed over
ty of their water supply when it was decided to locate a large
nent explosives works on the Cumberland River, about 12
bove the city. An investigation was made by the Public
Service and a report submitted, including suitable recom-
ions for the disposal of sewage at the Government plant and

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for necessary additional safeguards to the water supply. Later, the question of the discharge of waste acid liquors into the Cumberland River was raised, and a board was appointed to consider this matter. Extensive studies were made and a remedial plan was worked out.

The attempt on the part of the city of Petersburg, Va., to furnish water to Camp Lee led to a shortage in the supply and inadequacy of treatment. An officer of the service investigated this situation and made recommendations toward general improvement of the supply. The city having declined to make the necessary changes this matter was later referred to the War Department, which assumed charge of the entire waterworks.

Shortly after the signing of the armistice serious complaint arose in Milwaukee, Wis., over the alleged pollution of the drinking water by a phenol plant located south of the city and discharging wastes into the lake about 12 miles from the waterworks intake. Investigation by the service showed that the complaints were well founded. Recommendations were made that the matter be referred to the War Department, and that the contract under which the plant was operating be canceled. The operation of this plant was discontinued very shortly thereafter.

At the request of the Navy Department a visit of inspection was made to the marine camp, Quantico, Va., and a report with recommendations was subsequently submitted, with reference to the proper treatment and disposal of sewage of the camp.

A small factory at Gaithersburg, Md., engaged in canning beans for the War Department, had failed to provide proper means of disposal for its waste water and was seriously polluting a small stream. Complaints of nuisance in the town and of the poisoning of cattle were pressed and the closing down of the factory was seriously threatened. An investigation made by the service resulted in the construction of some temporary works which greatly relieved the situation and made it possible to continue the factory in operation throughout the remainder of the season.

In connection with service activities at Newport News, the importance of milk pasteurization led to the study of the possibilities of a central pasteurizing plant for that city. An officer of the service who had already made similar studies for Tuscaloosa, Ala., was assigned to this study and prepared complete plans and in part supervised the installation of this pasteurizing plant. The plant at this time is complete and in operation under the general supervision of the service.

A similar need for a satisfactory milk supply having arisen at the Government powder plant at Nitro, W. Va., plans were originally prepared for a pasteurization plant, but it was later decided to undertake at that point a demonstration of the possibilities of

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ıstructed milk. An officer of the Public Health Service accord-
prepared plans and supervised the construction of this plant.
ɔperation has been most satisfactory, and an abundant supply
an and wholesome milk was assured the city at a price consider-
lower than normal city prices at the time.

ɔperation with other Government agencies, Council of National se, War Industries Board, Capital Issues Committee.—Actuated was by the desire to do all in its power to insure the success of ation's great undertaking, the Public Health Service gave freely services to other Government departments and to agencies ed in war work. Mention has already been made of the cooper- with the military authorities and the American Red Cross in ınitation of extra-cantonment areas and of the cooperation the Bureau of War Risk Insurance in providing medical and al care for beneficiaries of the insurance fund. The Public h Service also cooperated with the Council of National Defense, medical section of which the Surgeon General served as chair- ıf the committee on Hygiene and Sanitation. In the council's ı on labor, the Public Health Service took an active part in ɪs relating to industrial hygiene; with the National Research il it cooperated in a number of scientific investigations, and it ıed expert advice as to the health needs of civilian communities priorities committee of the War Industries Board and to the l Issues Committee.

ted States Navy.—An important war activity of the Public ı Service was its cooperation with the Navy Department. the purpose of assisting in the protection of health of the Navy us aid in increasing the efficiency of the Navy as a fighting ı medical officer of the Public Health Service was detailed as ion officer to each of the 14 naval districts in the United

ɜneral the duties of these officers embraced the following:

make regular inspections of the sanitary conditions of the naval stations and ı within the naval districts to which they are assigned, with special reference supplies, sewage, garbage and manure disposal, introduction, presence and ɔn of cases of communicable diseases, the presence of disease-carrying insects, ditions favoring their growth, and to the facilities for messing and housing nnel.

secure information by personal observation and through civilian health ɛs as to the prevalence of communicable diseases and sanitary conditions in around naval stations and in localities from which recruits are collected.

ıdvise and assist in eradicating any communicable disease that may make rance in the district, and to make such epidemiological investigations as ecessary and practicable.

ecure information as to the quality of water and milk supplied to both naval ł civil population in the immediate environments of camps and stations, methods of disposal of sewage, etc., in such localities.

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5. To pay particular attention to the presence of disease-bearing and other mosquito-breeding areas either within the camp or within its immediate environment.

6. To determine as far as practicable the prevalence of venereal diseases in the civil communities adjacent to camps and stations, and the measures used for their control.

7. To make monthly inspection of the industrial establishments in the navy yards and make suitable recommendations, when necessary, for the correction of insanitary and unhygienic conditions.

Additional activities were undertaken as the needs arose. In the New York Naval District, for example, these included the inspection of various shipyards in the neighborhood where navy yard personnel was employed, the inspection of ships belonging to the transport cruiser force, and the fumigation of these vessels by the Navy personnel under the direction of the sanitation officer.

Publications Relating to War Activities.

An important function of the Public Health Service is the dissemination of information regarding public health matters. The following list of articles published by the service gives such a good idea of the war activities of the Public Health Service that its publication here may be of interest:

Trachoma and the Army—The Dangers Incident to Enlisting Recruits Affected with the Disease. By John McMullen.

Meningococcus Carriers—Their Recognition and Treatment.

Certain Military Aspects of Hookworm Disease. By Ch. Wardell Stiles.

The Lighting of Industrial Establishments—The Need for Supervision, with Suggested System of Maintenance Rating for Artificial Light Equipment. By Davis R. Tuck.

The Simulation of Disease—Drugs, Chemicals, and Septic Materials Used Therefor. By A. G. DuMez.

Trinitrotoluol—Practical Points in Its Safe Handling. By J. W. Schereschewsky.

Mitigation of the Heat Hazard in Industries. By J. A. Watkins.

Extra-Cantonment Zone Sanitation—Camp Shelby, near Hattiesburg, Miss. By J. A. Watkins.

Industrial Efficiency—The Bearings of Physiological Science Thereon—A Review of Recent Work. By Frederic S. Lee.

Morbidity Statistics of War Industries Needed. By B. S. Warren.

A State-wide Plan for the Prevention of Venereal Disease. By Allan J. McLaughlin.

Extra-Cantonment Zone Sanitation, Newport News, Va., and Vicinity. By S. B. Grubbs.

Methods for Field Study of Industrial Fatigue. By P. Sargant Florence.

Suggestions for State Board of Health Regulations for the Prevention of Venereal Diseases.

The Present Status of Our Knowledge of Fatigue Products. By Ernest L. Scott.

Progress in Venereal Disease Control. By J. G. Wilson.

The Dietary Deficiency of Cereal Foods with Reference to Their Content in "Anti-neuritic Vitamine." By Carl Voegtlin, G. C. Lake, C. N. Myers.

The Growth-Promoting Properties of Foods Derived from Corn and Wheat. By Carl Voegtlin and C. N. Myers.

Phosphorus as an Indicator of the "Vitamine," Content of Corn and Wheat. By Carl Voegtlin and C. N. Myers.

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e Qualitative and Quantitative Tests for Arsphenamine. By C. N. Myers G. DuMez.
d Milk Powder—A Review of British Experience.
and Federal Cooperation in Combating the Venereal Diseases. By J. G.

rol of Diseases in Establishments for the Manufacture and Loading of High ives. Report of Divisional Committee on Industrial Diseases, Section of Sani- of the Committee on Labor, Council of National Defense.
real Disease Control—Standards for Discharge of Carriers.
lations—Promulgated by the Secretary of the Treasury, under which State or State Departments of Health Receive the Allotment of Funds provided in 6, Chapter XV, of the Act approved July 9, Entitled "An Act Making Appro- s for the Support of the Army for the Fiscal Year Ending June 30, 1919."
Program of the Public Health Service—Intended Especially for Extra-Canton- eas and War Industrial Centers.
ation of Rural Workmen's Areas—With Special Reference to Housing. Report ional Committee on Village and Public Sanitation, Section of Sanitation, tee on Welfare Work of the Committee on Labor, Advisory Commission, of National Defense.
linary Report on Carbon Tetrachloride Vapor as a Delousing Agent. By oster.
enance of Health in Industries—Its Relation to the Adequate Production of erials.
Cantonment Zone Regulations—Regulations Governing the Sale of Food and the Special Sanitary Zone Around Camp Pike, near Little Rock, Ark.
is in Court-plaster—Results of the Bacteriological Examination of Fourteen is.
neria, an Epidemic, Probably of Milk Origin, Occurring at Newport, R. I., nity.
enamine (Salvarsan) Licenses Ordered and Rules and Standards Prescribed anufacture.
al Disease Legislation—A Compilation of Laws and Regulations Showing d of Modern Legislation for the Control of Venereal Diseases.
al Fatigue as a Factor in Increasing Susceptibility to Communicable Disease.
x from Shaving Brushes.
rial Fatigue—Investigation by Means of Factory Statistics.
serve of the Public Health Service.

RATION OF THE RED CROSS IN PUBLIC HEALTH SERVICE HOSPITALS.

of the soldiers, sailors, and marines who are undergoing ation and treatment in the hospitals operated by the United Public Health Service are but recently discharged from mili- spitals, where they have been the recipients of much kindness olunteer organizations. Because of legal limitations which the service from supplying these delicacies of comfort, the General expressed the desire to the American Red Cross cooperate with the Public Health Service in supplying them. ivities to be undertaken are similar to those conducted by

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of children, the solution of household and legal difficulti
isfactory working conditions, and to help in case of lonel
depression, or physical disability.

4. Emergency service, to meet certain emergency situ
as supplementing the clothing of soldiers and sailors duri
cold spells.

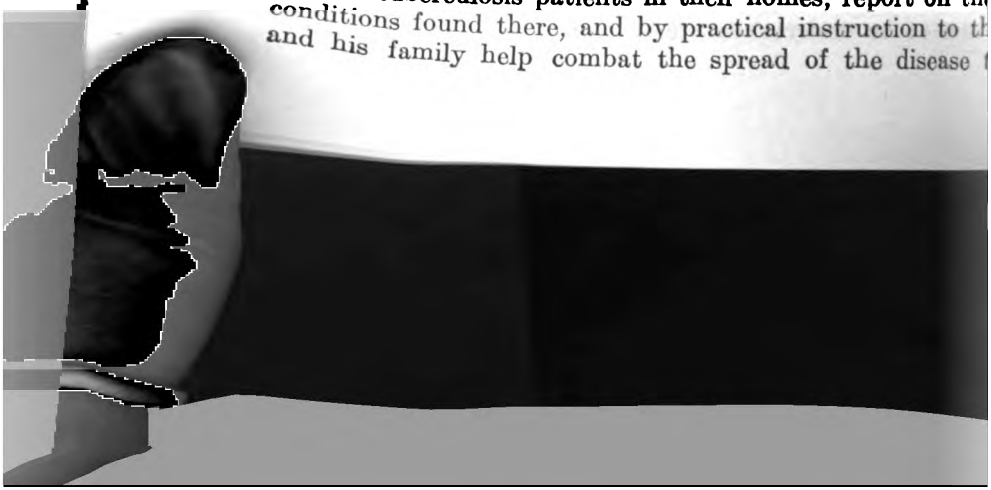
5. Miscellaneous, covering a variety of activities, suc
vegetable gardens, furnishing diet kitchens, mending cl
ing lawns and shrubberies around hospital buildings, n
to soldiers and sailors, conducting Christmas celebrations

The American Red Cross, through its vice chairman, Mr.
G. Walling, has heartily concurred in the idea of coopc
the organization and direction of the work are being un
the department of civilian relief.

The commissioned medical officers, acting assistant su
others of the Public Health Service concerned, have bee
by the Surgeon General to cooperate with the Red Cross
formance of this work and to offer to Red Cross represe
the facilities possible at their stations to properly carry o
gram outlined in so far as it is applicable to the hospitals
charge.

HAS YOUR COMMUNITY A PUBLIC HEALTH NU

To those who have followed the development of public h
in this country it becomes more and more evident that m
progress which has been made is due to the introduction
health nursing as an integral part of public health admi
And yet it seems but yesterday when the first nurses wer
to visit tuberculosis patients in their homes, report on th
conditions found there, and by practical instruction to t
and his family help combat the spread of the disease



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esults achieved by this band of pioneers exceeded all expecta- so that in a short time it was realized that in no other way the work of public authorities so effectively be brought home people.

reasons for this are not far to seek, for the personal contact stablished between the health authorities on the one hand e people on the other is incomparably more effective than any means of promoting health education.

ould be a long story to describe in detail all the important ies now carried on in a modern health department by public nurses. The fact is that the work of these newer recruits to nks of public health workers has proved invaluable. They tudied and reported on the home conditions so frequently sible for disease, discovered unreported cases of infectious dis- given practical instruction in the prevention and care of infec- liseases, collected epidemiological and statistical data, super- he maintenance of quarantine measures, helped in securing medical and surgical treatment for the sick; in short, they nade possible the practical utilization of valuable medical dge and experience for the promotion of health and welfare.

rtunately, a very large number of communities in the United are still without a public health nursing service. It seems not alized that such a service constitutes a well-paying investment. thing has been more clearly demonstrated. Progressive health strators who have had experience with public health nursing nimous in praise of the results obtained.

than ever before there is great need for additional well-trained s in this field. It is to be hoped the time is not far distant very community throughout the United States will enjoy the of a system of public health nursing, for experience has trated that this is an invaluable measure for bringing the the health authorities to the people.

not at once take steps so that your community may enjoy aluable services of a public health nurse?

COURSES IN PUBLIC HEALTH NURSING.

sponse to numerous requests concerning the training of public nurses, we publish the following list of training courses, com- the National Organization for Public Health Nursing.

setts:

nths' course at Simmons College, 300 Fenway, Boston. Tuition, $80. En- nce requirements, high-school graduation and eligibility for National Organ- tion for Public Health Nursing.

nths' course, Simmons College, 300 Fenway, Boston. Tuition, $20. En- nce requirement, eligibility for National Organization for Public Health rsing.

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Connecticut:

9 months' course at New Haven Visiting Nurse Association and Yale University, 200 Orange Street, New Haven. Tuition free. Entrance requirement, graduate registered nurse.

New York:

8 months' course at Teachers' College, New York City. Tuition $185. Entrance requirements, three years of high school; graduate registered nurse, and eligibility for National Organization for Public Health Nursing.

8 months' combination course; 4 of theory at Teachers' College, and 4 of practice with Henry Street Settlement. Tuition $90. Same requirements.

4 months' course in practical work at Henry Street Settlement, with some classes at Teachers' College. Tuition, $41. Same requirements.

Ohio:

8 months' course at Medical College, University of Cincinnati. Tuition, $30 to those outside of State. Entrance requirement, high-school graduation.

8 months' course at School of Practical Arts, Western Reserve University. Tuition, $125. Entrance requirement, eligibility for National Organization for Public Health Nursing.

Pennsylvania:

8 months' course at Pennsylvania School for Social Service, 1302 Pine Street, Philadelphia. Tuition, $75. Entrance requirements, high school graduation and eligibility for National Organization for Public Health Nursing.

Illinois:

8 months' course, School of Civics, 2559 South Michigan Avenue, Chicago, Ill. Tuition, $35. Entrance requirement, graduate nurse.

4 months' course, School of Civics, Tuition, $35. Same requirement.

Missouri:

9 months' course at School of Social Economy, 2221 Locust Street, St. Louis. Tuition, $50. Entrance requirement, graduate registered nurse.

Virginia:

8 months' course, School for Social Work and Public Health, 1112 Capitol Street, Richmond. Tuition, $40. Entrance requirement, graduate nurse.

4 months' course, same school. Tuition, $20. Same requirement.

Wisconsin:

4 months' course with Wisconsin Anti-Tuberculosis Association, 471 Van Buren Street, Milwaukee. Tuition, $25. Entrance requirement, graduate registered nurse.

Summer courses have also been given at the following places:

Teachers' College, New York City,: Six weeks.

Cleveland Normal School, Cleveland, Ohio (school nursing): Six weeks.

University of Washington, Seattle, Wash: Eleven weeks.

University of California, Berkeley and Los Angeles: Six weeks.

Syracuse University, Syracuse, N. Y.: Six weeks.

Minnesota Anti-Tuberculosis Association, St. Paul, Minn.: Six weeks.

Wisconsin Anti-Tuberculosis Association, Milwaukee (for experienced workers): Six weeks.

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ATHS DURING WEEK ENDED MAY 24, 1919, IN CITIES.

e table following shows the registered deaths from all causes and pneumonia (all forms) and influenza combined in certain large of the United States during the week ended May 24, 1919.

data are taken from the "Weekly Health Index," May 27, issued by the Bureau of the Census, Department of Commerce.

ed deaths and annual death rates per 1,000 population in certain large cities of nited States, week ended May 24, 1919--Deaths from all causes, and from pneu- (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
. Y.	112,565	33	15.3	C. 14.8	6	2.8
a.	201,732	58	15.0	C. 17.8	.....	.....
, Md.	[2] 669,981	216	16.8	A. 16.2	.....	.....
ass.	785,245	220	14.6	A. 15.9	16	1.1
. Y.	473,229	129	14.2	C. 14.1	.....	.....
, Mass.	111,432	26	12.2	A. 13.7	.....	.....
.	2,596,681	660	13.3	A. 14.4	73	1.5
, Ohio.	418,022	104	13.0	C. 15.5	.....	.....
Ohio.	810,306	171	11.0	C. 10.5	24	1.5
Ohio.	225,296	60	13.9	C. 11.6	6	1.4
hio.	130,655	27	10.8	C. 15.2	2	.8
, Mass.	128,392	33	13.4	C. 13.0	2	.8
ids, Mich.	135,450	34	13.1	C. 9.6	.....	.....
is, Ind.	290,399	64	11.5	C. 13.5	.....	.....
, N. J.	318,770	78	12.8	C. 12.1	.....	.....
y, Mo.	313,785	78	13.0	C. 15.1	8	1.3
s, Calif.	568,495	124	11.4	A. 12.5	.....	.....
Ky.	242,707	87	18.7	C. 14.2	10	2.1
ss.	109,081	29	13.9	A. 15.6	.....	.....
Penn.	154,759	57	19.2	C. 19.2	3	1.0
, Wis.	453,481	80	9.2	A. 11.5	13	1.5
s, Minn.	383,442	94	12.8	C. 12.0	.....	.....
Penn.	119,215	45	19.7	C. 17.9	7	3.1
. J.	428,684	85	10.3	C. 16.2	.....	.....
, Conn.	154,865	32	10.8	C. 16.8	.....	.....
is, La.	382,273	117	16.0	A. 19.0	.....	.....
N. Y.	5,215,879	1,258	12.6	C. 12.5	170	1.7
alif.	214,206	54	13.1	A. 10.7	.....	.....
br.	180,264	33	9.5	C. 14.5	.....	.....
a, Pa.	1,761,371	593	17.6	[3] 15.7	.....	.....
Pa.	593,303	157	13.8	C. 13.4	38	3.3
reg.	.....	55	.....	.....	6	.....
R. I.	263,613	54	10.7	C. 11.1	4	.8
Va.	160,719	42	13.6	C. 10.1	3	1.0
N. Y.	264,856	75	14.8	C. 12.8	12	2.4
lo.	779,951	171	11.4	C. 13.8	.....	.....
inn.	257,699	62	12.5	C. 12.5	.....	.....
co, Calif.	478,530	139	15.1	C. 14.4	21	2.3
sh.	.....	67	.....	.....	8	.....
ash.	.....	18	.....	.....	.....	.....
. Y.	161,404	37	12.0	C. 13.2	3	1.0
o.	262,234	55	10.9	A. 14.8	2	.4
, D. C.	401,681	128	16.6	A. 15.8	10	1.3
Mass.	173,650	58	17.4	C. 12.3	11	3.3

cates that the rate given is the average annual death rate per 1,000 population for the corre- ek of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate pulation for the corresponding week of 1918.
on estimated as of July 1, 1919.
ased on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED MAY 31.

CAMP DIX ZONE, N. J.

Diphtheria:	Cases.
New Hanover Township	1
Springfield Township	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chancroid	1
Gonorrhea	6
Measles	1
Syphilis	3
Typhoid fever	1

CAMP FUNSTON ZONE, KANS.

Junction City:	
Diphtheria	1
Manhattan:	
Chicken pox	7
Gonorrhea	2
Scarlet fever	1
Whooping cough	5
Milford:	
Tuberculosis	1

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Chancroid:	
Columbus	1
Erysipelas:	
Columbus	1
Gonorrhea:	
Columbus	2
Hookworm:	
Muscogee County	1
Measles:	
Columbus	5
Muscogee County	9
Pellagra:	
Girard	1
Smallpox:	
Columbus	1
Muscogee County	2
Syphilis:	
Girard	2
Tuberculosis:	
Columbus	1
Muscogee County	1
Tuberculous adenitis:	
Columbus	1
Typhoid fever:	
Muscogee County	1
Whooping cough:	
Muscogee County	5

CAMP GORDON ZONE, GA.

Atlanta:	Cases.
Chancroid	1
Chicken pox	2
Diphtheria	1
Gonorrhea	2
Influenza	1
Measles	1
Mumps	1
Pneumonia	1
Scarlet fever	1
Septic sore throat	1
Smallpox	2
Syphilis	1
Tuberculosis	1
Typhoid fever	1

GULFPORT HEALTH DISTRICT, MISS.

Dysentery:	
Caesar	1
Long Beach	1
Lyman	1
Gonorrhea:	
Biloxi	1
Gulfport	1
Lyman	1
Pascagoula	1
Malaria:	
Bay St. Louis	1
Gulfport	1
Handsboro	3
Kiln	1
Logtown	1
Lyman	3
Mississippi City	2
Moss Point	6
Measles:	
Pecan	2
Mumps:	
Gulfport	2
Lyman	3
Moss Point	1
Mississippi City	1
Ophthalmia neonatorum:	
Moss Point	1
Smallpox:	
Lyman	1
Tuberculosis:	
Long Beach	1
Whooping cough:	
Gulfport	1

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CAMP A. A. HUMPHREYS ZONE, VA.

ria:	Cases.
ken pox	2
theria	1
ps	1
oid fever	3

CAMP LEE ZONE, VA.

rg:	
rrhea	5
illis	6
rculosis	1

CAMP MERRITT ZONE, N. J.

d:	
en pox	9
heria	2
s	3
en pox	1
s	2
s	1

PICRIC ACID PLANT ZONE, GA.

r:	
rhea	4
onia	1
is	1

CAMP PIKE ZONE, ARK.

Rock	1
ix:	
Rock	1
:	
Rock	6
Little Rock	8
	1
Rock	4
Little Rock	1
Rock	1
Little Rock	1
Rock	1
Little Rock	1
	1
:	
Rock	2
r:	
Little Rock	1
Rock	3
s:	
ock	1
	2
Dome	1

CAMP POLK ZONE, N. C.

:	
	1
n Township	1
ork Township	1

CAMP POLK ZONE, N. C.—continued.

Gonorrhea:	Cases.
Durham	3
Raleigh	2
Wake Forest Township	2
Mumps:	
Durham Township	1
Raleigh	1
Scarlet fever:	
White Oak Township	1
Smallpox:	
Raleigh	2
Syphilis:	
Durham	1
Tuberculosis:	
Cary Township	1
Raleigh	1
Typhoid fever:	
Durham	1
Wake Forest Township	1
Whooping cough:	
Buckhorn	1
Durham	17
White Oak Township	3

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Chicken pox:	
Norfolk	2
Diphtheria:	
Portsmouth	1
Measles:	
Norfolk	4
Mumps:	
Norfolk	1
Smallpox:	
Norfolk	2
Portsmouth	2
Typhoid fever:	
Portsmouth	1
Whooping cough:	
Norfolk County	5

CAMP SHERMAN ZONE, OHIO.

Gonorrhea:	
Government clinic	1
Scarlet fever:	
Chillicothe	2
Scioto Township	1
Syphilis:	
Government clinic	3

SOUTHER FIELD ZONE, GA.

Paratyphoid fever	1
Rabies in animals	2

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Gonorrhea	9
Lethargic encephalitis	1
Scarlet fever	1
Smallpox	2
Typhoid fever	1

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CAMP UPTON ZONE, N. Y.

Brook Haven:	Cases.
Diphtheria	2
Pneumonia	1
Syphilis	1
Tuberculosis	1
Riverhead:	
Chicken pox	3

WILMINGTON SANITARY DISTRICT, N. C.

Wilmington:	Cases.
Chicken pox	7
Gonorrhea	8
Pneumonia	1
Syphilis	1
Tetanus	1
Tuberculosis	1
Typhoid fever	1
Whooping cough	1

DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended May 23, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	552.40	39.6
All troops in United States	1,114.35	94.8
American Expeditionary Forces	330.95	36.2
Annual admission rate per 1,000 (disease only)	488.75	34.8
All troops in United States	1,083.20	85.6
American Expeditionary Forces	290.25	25.7
Noneffective per 1,000 on day of report	26.67	5.77
All troops in United States [1]	15.97	4.73
American Expeditionary Forces	26.79	26.6
Annual death rate per 1,000 (all causes)	5.98	4.67
All troops in United States [1]	8.39	4.68
American Expeditionary Forces	4.97	4.69
Annual death rate per 1,000 (disease only)	4.05	1.68
All troops in United States [1]	7.36	1.53
American Expeditionary Forces	2.79	2.28

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

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Cases of special diseases reported during the week ended May 23, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective rate per 1,000 on day of report.
.....	1	....	....	14	3	....	....	....	....	1,122.75	215.51
.....	....	....	....	.....	.....	....	....	....	....	371.04	12.23
.....	....	....	....	14	7	....	....	....	....	867.14	32.24
.....	....	....	....	10	.....	1	....	....	2	445.30	81.18
.....	1	....	....	15	4	....	....	....	....	454.77	48.67
.....	2	....	....	11	4	....	....	....	....	296.96	76.49
.....	....	....	....	3	.....	....	1	....	....	1,326.45	89.58
.....	....	....	....	99	.....	....	....	....	....	1,967.74	79.19
.....	1	....	....	19	1	....	....	....	1	947.78	98.64
eys.....	....	....	....	6	2	....	....	....	....	368.35	21.64
.....	2	....	4	26	.....	....	....	....	....	854.90	101.70
.....	1	....	....	4	4	....	....	....	....	1,915.68	165.59
nox.....	1	....	....	3	.....	....	....	....	....	100.10	4.91
.....	....	....	....	15	12	....	....	....	1	1,082.09	126.95
.....	1	....	....	5	3	....	2	....	....	1,843.44	114.75
.....	1	....	2	16	2	....	....	....	17	813.99	77.44
.....	2	....	....	30	5	....	....	....	....	993.51	105.17
.....	....	....	....	19	.....	....	....	....	....	701.84	60.85
.....	1	....	....	17	.....	1	....	....	2	974.41	110.90
.....	....	....	1	6	3	....	....	....	4	1,130.57	112.54
.....	....	....	4	12	10	....	....	....	....	1,183.34	76.54
.....	5	....	....	116	.....	....	1	....	....	1,277.24	58.39
.....	....	....	....	14	.....	....	....	....	....	716.16	18.56
tern Department.....	....	....	....	2	2	....	....	....	....	453.59	20.99
Department.....	1	....	....	20	7	....	....	....	....	471.67	17.62
tern Department.....	....	....	....	9	1	....	....	....	....	859.73	28.80
epartment.....	....	....	....	13	.....	....	....	....	....	541.05	16.96
Department.....	1	....	....	58	3	6	....	....	....	680.64	58.29
Department.....	....	....	1	16	12	....	2	....	....	570.99	15.50
camps.....	....	....	....	26	9	1	....	....	1	675.40	41.92
nbarkation:											
ken.....	2	1	....	36	4	5	6	....	....	3,242.26	96.42
ort News.....	13	....	....	103	3	61	....	....	2	1,629.51	89.77
roe.....	....	....	....	7	.....	....	....	....	....	590.36	24.24
Disciplinary Barracks.....	....	....	....	.....	.....	....	....	....	....	705.08	16.94
orth Disciplinary Barracks.....	....	....	....	.....	.....	....	....	....	....	809.21	38.59
; Barracks.....	....	....	....	1	1	....	....	....	....	819.20	24.75
Barracks.....	....	....	....	3	2	....	....	....	....	963.44	26.03
an.....	....	....	....	3	.....	....	....	....	....	582.54	16.50
owell.....	....	....	....	1	.....	3	....	....	....	844.38	31.12
.....	....	....	....	7	7	....	....	....	....	363.36	16.91
im.....	....	....	....	2	1	....	....	....	....	636.30	28.55
nas.....	....	....	....	5	5	....	....	....	....	1,224.73	27.47
it.....	....	....	....	.....	.....	....	....	....	....	590.90	17.94
.....	....	....	....	6	.....	....	....	....	....	572.90	31.43
ous small stations.....	....	....	....	2	.....	....	....	....	....	328.57	30.31
al.....	36	1	12	794	117	78	12	....	30	1,013.58	55.82

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Number of deaths at large camps in United States, week ended May 24, 1919.

Camp.	Strength.	Deaths.		Camp.	Strength.	Deaths.	
		All causes.	Disease only.			All causes.	Disease only.
Bowie	2,501			Taylor	7,519	2	1
Bragg	982			Travis	3,927	2	1
Custer	5,207			Upton	19,428	3	1
Devens	3,758			Northeastern Department	2,206		
Dix	22,445			Eastern Department	13,461		
Dodge	6,654			Southeastern Department	3,780		
Funston	3,208	1	1	Central Department	4,431		
Gordon	4,826	1	1	Southern Department	20,201	3	
Grant	8,120	1	1	Western Department	11,886		
Humphreys	2,541	1	1	Aviation camps	14,986	1	
Jackson	5,231			Port of embarkation:			
Kearny	2,629			Hoboken	34,466	1	1
Henry Knox	9,250			Newport News	13,695	1	1
Lee	5,238			All others	86,657	42	28
Lewis	4,880						
Meade	10,862			Total	374,143	89	58
Pike	5,706						
Shelby	4,075	1	1				
Sherman	11,109	1	1				

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	5.00	3.84	4.48	4.48
Dysentery	.13		.20	.20
Malaria	1.68	.80	.28	.28
Venereal	110.36	98.87	67.14	58.52
Paratyphoid			.10	.10
Typhoid	.13	.13	.21	.21
Measles	1.66	1.66	1.28	1.28
Meningitis		.13	.22	.22
Scarlet fever	4.17	2.02	.28	.28
Influenza	10.84	6.53		

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended May 31, 1919.

Alabama.—State totals: Typhoid fever 7, malaria 12, smallpox 23, scarlet fever 46, diphtheria 7, whooping cough 3, measles 4, chicken pox 8, mumps 6, tuberculosis 25, venereal diseases 16.

California.—Influenza: Cases reported 123. Smallpox: Oakland 2, San Francisco 3, Santa Clara County 1, San Jose 3, Lincoln 1, Los Angeles County 2, Long Beach 2, Pasadena 2. Typhoid fever: Sacramento County 2, Oakland 1, San Francisco 1, Calexico 1, Modoc County 1, Los Angeles County 1, Long Beach 1, Santa Barbara 1. Cerebrospinal meningitis: Tulare County 1, Merced County 1.

Connecticut.—Cerebrospinal meningitis in New Haven 1.

Delaware.—Chancroid in Wilmington 2. Gonorrhea in Wilmington 14, Laurel 1. Malaria in Dover 1. Measles: Dover 8, Wilming-

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1, Wyoming 1. Tuberculosis: Dover 1, Felton 1, New Castle 1.
hoid fever: Wilmington 1, Seaford 1.
lorida.—Typhoid fever by counties: Escambia 1, Gadsden 1,
sboro 1, Pinellas 1, Volusia 2, Monroe 1. Total typhoid fever
s reported 7. Malaria, State total, 10.
orgia.—State totals: Acute infectious conjunctivitis 5, hook-
n 4, cerebrospinal meningitis 1, chicken pox 21, diphtheria 6,
ntery (amebic) 14, dysentery (bacillary) 35, gonorrhea 87, influ-
2, malaria 28, measles 32, mumps 27, pneumonia (acute lobar)
abies in animals 2, scarlet fever 10, septic sore throat 2, smallpox
yphilis 50, tuberculosis (other than pulmonary) 1, tuberculosis
nonary) 14, typhoid fever 16, whooping cough 6.
inois.—Diphtheria: Cases reported 143, of which in Chicago 101,
lb 6, Joliet 3. Scarlet fever: Cases reported 105, of which in
go 62, Oglesby 6, Stockton 4, Woosung Township (Ogle County)
ffalo Township (Ogle County) 3. Smallpox: Cases reported 140,
ich in McLeansboro 21, Rock Island 19, Peoria 13, Galesburg
awyerville 7, Rio Township (Knox County) 6, Pekin 6, Norris 6,
erville Township (Greene County) 6, Aurora 5, Fairmount 5,
n Township (Fulton County) 4, East Peoria 4, Muncie 4, Sub-
Township (Lee County) 3, Erie 3, Chicago 3. Meningitis in
go 2. Poliomyelitis in Chicago 2. Lethargic encephalitis in
eld 1. Influenza: Cases reported 21, of which in Chicago 20.
rrhea 104, syphilis 48.
iana.—Smallpox in Elkhart County. Diphtheria: Dekalb
y reports 1 case and Hendricks County 2. Typhoid fever: 1
eported from Noblesville. Rabies: Jeffersonville 1, Noblesville
yphilis 38, gonorrhea 83, chancroid 5.
a.—Chancroid: Des Moines 1, Manning 1. Chickenpox: Avoca
enport 3, Mason City 1. Diphtheria: Council Bluffs 1, Daven-
t, Des Moines 2, Dubuque 1. Gonorrhea: Arthur 2, Cedar
s 2, Cherokee 2, Davenport 6, Des Moines 3, Dubuque 1, Lake
, Manning 1, Mason City 2. Measles: Davenport 1. Mumps:
port 2, Fort Des Moines 1. Scarlet fever: Brooklyn 1, Council
1, Des Moines 6, Fort Dodge 1, Lamoni 1, Livermore 1, Mc-
1, Villisca 4. Smallpox: Albia 1, Boone 6, Cedar Falls 1,
Rapids 13, Council Bluffs 3, Davenport 18, Des Moines 10,
ue 1, Fort Dodge 1, Mason City 2, Postville 1, Sumner 2.
is: Des Moines 1, Dubuque 1. Whooping cough: Council
2. In rural districts of the following counties: Scarlet fever:
1, Clarke 1, Decatur 1, Polk 1. Smallpox: Buchanan 6,
5, Grundy 5, Keokuk 1, Lucas 1, Mahaska 1, Wapello 1,
1, Wright 1.
sas.—Meningitis by cities: Leavenworth 1, Topeka 1. State
Smallpox 76, diphtheria 19, scarlet fever 47, influenza 39.

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Wabasha (Wabasha County) 4, South Haven (Wright
Syphilis 30, gonorrhea 56, chancroid 1. Cerebrospinal me

Mississippi.—Three cases scarlet fever reported from
No other outbreak or unusual prevalence.

New Jersey.—Cases reported: Influenza 16, pneumonia 5
pox reported from Beverly city, Bordentown city, V
Township (Burlington County), Camden, Pensauken
(Camden County), Belleville, and Newark. No unusual
of other diseases reported.

New York.—State reports, exclusive of New York City.
fever 9, measles 438, scarlet fever 125, whooping cough
theria 170, smallpox in Oneonta 1, cerebrospinal meningitis
town 1, pneumonia 47. Voluntary reports: Syphilis 91,
27, poliomyelitis, reported from Middletown, 1.

North Carolina.—State totals: Whooping cough 150, m
diphtheria 13, scarlet fever 9, septic sore throat 1, smallpox
en pox 18, typhoid fever 26, epidemic meningitis 1, bro
monia 6, lobar pneumonia 4, cholera infantum 8, dysent
lary) 11, dysentery (amebic) 6, trachoma 2, gonorrhea 14
49, chancroid 15, gonorrhea and syphilis 2, gonorrhea and
3, gonorrhea and balanitis 1, gonorrhea syphilis and ch
influenza reported from Cumberland County 1 case.

Ohio.—Scarlet fever: Washington Court House 8, Cuya
8, Cincinnati 32, Ashtabula 9, Youngstown 9, Akron 9.
Washington Court House 6, New Lexington 6, Youngstown
land 18, Hamilton 9, Crooksville 8. Lethargic encephalitis
Cuyahoga Falls 1.

Oregon.—Portland reports 10 cases and 2 deaths from
Hood River 14, and Linn 6.

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Vermont.—No outbreak or unusual prevalence.

Virginia.—Smallpox: Cases reported in Norfolk County 1, Bed- l 1, and Alexandria 1.

Vashington.—No outbreak or unusual prevalence reported. Small- : Seattle 19, Everett 12, Yakima 2. Scarlet fever: Seattle 10, kane 14, Yakima 12.

Vest Virginia.—Diphtheria: Charleston 1, Fairmont 2, Wellsburg Wheeling 2. Measles: Charleston 2, Clarksburg 2, Fairmont 10, tington 2, Martinsburg 4, Parkersburg 3, Weston 15, Wheeling 1. let fever: Bluefield 5, Charleston 2, Hinton 2, Huntington 20, ser 1, Martinsburg 10, Parkersburg 5, Wheeling 2. Smallpox: mont 3, Hinton 1, Keyser 2, Wellsburg 2, Wheeling 1. Typhoid :: Wellsburg 1, Wheeling 1.

ANTHRAX.

Denver, Colo., and Philadelphia, Pa.

ıring the week ended May 17, 1919, one death from anthrax reported at Denver, Colo., and one case was reported at Phila- ıia, Pa.

CEREBROSPINAL MENINGITIS.

State Reports for April, 1919.

Place.	New cases reported.
a:	
neda County—	
Oakland	2
Angeles County	1
Los Angeles	4
Francisco	3
Joaquin County—	
Lodi	1
Total	11
cut:	
ield County—	
Bridgeport	2
Connecticut—Continued.	
Hartford County—	
Hartford	2
New Haven County—	
New Haven	1
Total	5
Indiana:	
Clark County	4
Knox County	1
Total	5
Oregon: Portland	1

City Reports for Week Ended May 17, 1919.

Place.	Cases.	Deaths.
, Md	1	1
Ohio		1
ll	5	2
x	1	
fich	1	
Mass	2	1
r, Mass	2	
, Tex		1
. Y	1	1
pids, Mich	1	1
ty, Mo	1	
na, N. Y	1	
es, Calif	1	
	1	
id		1
Middletown, N. Y.	1	1
Milwaukee, Wis	3	3
Muscatine, Iowa		1
Nashville, Tenn	1	1
Newark, N. J	1	1
New Brunswick, N. J	1	
New Haven, Conn	1	
New York, N. Y	8	6
Norwalk, Conn	2	
Paterson, N. J	2	
Philadelphia, Pa	4	3
Pocatello, Idaho		1
Quincy, Mass	1	1
St. Louis, Mo	1	
Waterbury, Conn	1	

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	Cases.	Deaths.
[illegible], Ind	2	
[illegible], S. C	1	
[illegible], Ill		
Little Rock, Ark	1	
	2	1

ek Ended May 17, 1919.

Place.	Cases.	Deaths.
Memphis, Tenn	1	2
Newark, N. J	1	
Savannah, Ga	1	2
Tuscaloosa, Ala		

17

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended May 31, 1919.

	Cases.
Fayetteville sanitary district, N. C	1
Gas and flame school zone, Ga. and Ala	14
Camp Gordon zone, Ga	15
Gulfport health district, Miss	22

	Cases.
Camp Merritt zone, N. J	3
Camp Pike zone, Ark	2
Portsmouth and Norfolk County health district, Va	4

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1288.

PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 31, 1919.

	Cases.
Gas and flame school zone, Ga. and Ala	1

	Cases.
Camp Pike zone, Ark	1

California Report for April, 1919.

During April, 1919, three cases of pellagra were reported in California; one case in San Bernardino County, and two cases in San Joaquin County.

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PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended May 31

	Cases.		
Camp Gordon zone, Ga.	1	Camp Pike zone, Ark.	
Picric acid plant zone, Ga.	1	Wilmington sanitary district, N. C	

City Reports for Week Ended May 17, 1919.

Place.	Lobar.		All forms.		Place.	Lobar.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.
Adams, Mass.	1	.....	.....	.....	Lynn, Mass.	4	
Anniston, Ala.	1	.....	.....	.....	Manchester, N. H.	1	
Atchison, Kans.	.....	.....	3	.....	Medford, Mass.	1	
Baltimore, Md.	14	7	.....	.....	Montclair, N. J.	2	...
Baton Rouge, La.	.....	.....	2	.....	Mount Vernon, N. Y.	1	
Bellaire, Ohio	1	.....	.....	.....	Newark, N. J.	32	
Belleville, N. J.	1	.....	.....	.....	New Bedford, Mass.	1	
Binghamton, N. Y.	2	.....	.....	.....	New Britain, Conn.	1	
Bloomfield, N. J.	.....	.....	2	.....	Newburgh, N. Y.	1	...
Boston, Mass.	23	12	.....	.....	Newburyport, Mass.	1	...
Brunswick, Ga.	3	.....	.....	.....	Newport, Ky.	1	
Cambridge, Mass.	5	1	.....	.....	New York, N. Y.	.....	
Camden, N. J.	2	.....	.....	.....	North Tonawanda, N. Y.	1	
Charleston, W. Va.	1	.....	.....	.....	Oak Park, Ill.	1	...
Chelsea, Mass.	1	.....	.....	.....	Ossining, N. Y.	3	
Chicago, Ill.	.....	.....	183	40	Passadena, Calif.	1	...
Cleveland, Ohio	12	17	.....	.....	Paterson, N. J.	2	...
Dallas, Tex.	1	.....	.....	.....	Philadelphia, Pa.	40	...
Dayton, Ohio	4	4	.....	.....	Pittsfield, Mass.	1	
Detroit, Mich.	4	16	5	22	Reno, Nev.	2	
Duluth, Minn.	.....	.....	7	6	Richmond, Va.	1	...
Elizabeth, N. J.	2	3	.....	.....	Rochester, N. Y.	10	...
El Paso, Tex.	2	.....	.....	.....	Rome, N. Y.	1	...
Fall River, Mass.	1	1	.....	.....	Salem, Mass.	3	...
Framingham, Mass.	1	.....	.....	.....	Sandusky, Ohio	.....	...
Geneva, N. Y.	11	11	.....	.....	San Francisco, Calif.	9	
Gloversville, N. Y.	2	2	.....	.....	Saratoga Springs, N. Y.	1	...
Grand Rapids, Mich.	6	2	.....	.....	Sault Ste. Marie, Mich.	2	...
Green Bay, Wis.	1	1	.....	.....	Schenectady, N. Y.	1	...
Haverhill, Mass.	1	.....	.....	.....	Somerville, Mass.	5	
Independence, Mo.	.....	.....	2	1	South Bend, Ind.	1	
Kalamazoo, Mich.	1	.....	.....	.....	Southbridge, Mass.	1	
Kansas City, Mo.	.....	.....	5	6	Springfield, Mass.	4	
Lackawanna, N. Y.	4	1	.....	.....	Winston-Salem, N. C.	1	...
Lawrence, Mass.	1	.....	.....	.....	Winthrop, Mass.	1	...
Leominster, Mass.	1	.....	.....	.....	Worcester, Mass.	2	
Los Angeles, Calif.	3	2	.....	.....			

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...ah, Ga., 4.

ROCKY MOUNTAIN SPOTTED OR TICK FEVER.

California and Wyoming, April, 1919.

During April, 1919, one case of Rocky Mountain spotted or tick fever was reported in Modoc County, Calif., and one case was reported in Fremont County, Wyo.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended May 31, 1919.

	Cases.		Cases.
Camp Funston zone, Kans	1	Camp Polk zone, N. C	1
Camp Gordon zone, Ga	3	Camp Travis zone, Tex	1
Camp Pike zone, Ark	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1288.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended May 31, 1919.

	Cases.		Cases.
Gas and flame school zone, Ga. and Ala	3	Portsmouth and Norfolk County health district, Va	4
Camp Gordon zone, Ga	34	Camp Travis zone, Tex	2
Gulfport health district, Miss	1		
Camp Polk zone, N. C	2		

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[illegible], Tex		1	Minneapolis, Minn	16	
Baltimore, Md	1		Mobile, Ala	7	
Baton Rouge, La	1		Moline, Ill	3	
Battle Creek, Mich	5		Muskogee, Okla	1	
Bedford, Ind	5		Nashville, Tenn	3	
Billings, Mont	1		New Orleans, La	4	1
Birmingham, Ala	3		Newport, Ky	1	
Bloomington, Ind	1		Norfolk, Va	5	
Boise, Idaho	2		Oakland, Calif	1	
Boston, Mass	1		Ogden, Utah	5	
Cambridge, Mass	1		Omaha, Nebr	26	
Carbondale, Pa	1		Oshkosh, Wis	15	
Cedar Rapids, Iowa	13		Parsons, Kans	2	
Chanute, Kans	1		Pekin, Ill	8	
Charleston, S. C	1		Pittsburgh, Pa	1	
Charleston, W. Va	1		Pocatello, Idaho	3	
Cheyenne, Wyo	1		Portland, Oreg	15	
Chicago, Ill	2		Portsmouth, Ohio	1	
Cincinnati, Ohio	1		Providence, R. I	1	
Cleveland, Ohio	10		Pueblo, Colo	2	
Council Bluffs, Iowa	2		Racine, Wis	4	
Dallas, Tex	10		Roanoke, Va	5	
Danville, Ill	2		Rockford, Ill	1	
Davenport, Iowa	7		Rock Island, Ill	15	
Denver, Colo	8		Saginaw, Mich	1	
Des Moines, Iowa	2		St. Cloud, Minn	1	
Detroit, Mich	12		St. Joseph, Mo	13	
Duluth, Minn	6		St. Louis, Mo	2	
Durham, N. C	4		St. Paul, Minn	8	
East St. Louis, Ill	1		Salt Lake City, Utah	6	
Everett, Wash	5		Savannah, Ga	1	
Flint, Mich	1		Seattle, Wash	14	
Fort Wayne, Ind	2		Sioux City, Iowa	4	
Fort Worth, Tex	2		Sioux Falls, S. Dak	1	
Galesburg, Ill	6		South Bend, Ind	3	
Hammond, Ind	1		Spartanburg, S. C	2	
Hoquiam, Wash	1		Spokane, Wash	3	
Houston, Tex	1		Springfield, Ill	1	
Independence, Mo	1		Springfield, Ohio	1	
Indianapolis, Ind	2		Steubenville, Ohio	1	
Kalamazoo, Mich	5		Stillwater, Minn	2	
Kansas City, Kans	1		Superior, Wis	1	
Kansas City, Mo	7		Tacoma, Wash	3	
Kokomo, Ind	9		Toledo, Ohio	18	
La Crosse, Wis	1		Tuscaloosa, Ala	1	
Lincoln, Nebr	15		Walla Walla, Wash	2	
Logansport, Ind	6		Washington, D. C	7	
Long Beach, Calif	4		Wichita, Kans	7	
Los Angeles, Calif	2		Winston-Salem, N. C	16	
Louisville, Ky	2		Yakima, Wash	3	
Lynchburg, Va	1		Youngstown, Ohio	12	
Madison, Wis	1		Zanesville, Ohio	1	
Mankato, Minn	2				

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SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended May 31, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	3	Camp Pike zone, Ark.	1
Gas and flame school zone, Ga. and Ala.	2	Camp Polk zone, N. C.	1
Camp Gordon zone, Ga.	10	Camp Sherman zone, Ohio.	1
Camp Lee zone, Va.	6	Camp Upton zone, N. Y.	1
Picric acid plant zone, Ga.	1	Wilmington sanitary district, N. C.	1

TETANUS.

City Reports for Week Ended May 17, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Birmingham, Ala.	1	1	New York, N. Y.	1	1
Cincinnati, Ohio.	1		Philadelphia, Pa.	1	
Duluth, Minn.		1	St. Louis, Mo.	1	
Lexington, Ky.	1		Topeka, Kans.	1	1
Lockport, N. Y.	1	1			

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended May 31, 1919.

	Cases.		Cases.
Camp Funston zone, Kans.	1	Camp Pike zone, Ark.	1
Gas and flame school zone, Ga. and Ala.	3	Camp Polk zone, N. C.	1
Camp Gordon zone, Ga.	2	Camp Upton zone, N. Y.	1
Gulfport health district, Miss.	1	Wilmington sanitary district, N. C.	1
Camp Lee zone, Va.	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1288.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended May 31, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C.	1	Portsmouth and Norfolk County health district, Va.	1
Gas and flame school zone, Ga. and Ala.	1	Camp Travis zone, Tex.	1
Camp Gordon zone, Ga.	1	Wilmington sanitary district, N. C.	1
Camp A. A. Humphreys zone, Va.	3		
Camp Polk zone, N. C.	2		

State Reports for April, 1919.

Place.	New cases reported.	Place.	New cases reported.
California:		California—Continued.	
Alameda County	1	Orange County	1
Berkeley	1	Orange	1
Oakland	4	Sacramento County	1
Contra Costa County	1	Sacramento	1
Richmond	1	San Bernardino County—	
Fresno County	2	San Bernardino	1
Humboldt County—		San Francisco	3
Eureka	1	San Joaquin County	1
Imperial County—		Stockton	1
El Centro	7	San Mateo County—	
Kern County	1	South San Francisco	1
Los Angeles County—		Sierra County	1
Covina	1	Tulare County	1
Los Angeles	7	Ventura County—	
Monterey County—		Santa Paula	1
Monterey	1	Total	8

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TYPHOID FEVER—Continued.

State Reports for April, 1919—Continued.

Place.	New cases reported.
d County—	
hel	1
geport	2
lton	1
nford	3
d County—	
tford	1
chester	2
thington	1
t Hartford	1
ven County—	
iden	2
Haven	2
ndon County—	
on	1
ton	2
tal	19
unty	7
County	2
Indiana—Continued.	
Decatur County	3
Elkhart County	1
Gibson County	2
Jefferson County	4
Lake County	29
LaPorte County	1
Lawrence County	1
Martin County	1
Putnam County	1
Rush County	1
Total	53
Oregon:	
Baker County	1
Lane County	1
Total	2
Wyoming:	
Sheridan County	1

City Reports for Week Ended May 17, 1919.

Place.	Cases.	Deaths.
a	1	
ass	1	
	3	
d	3	2
, La	1	
, Ala		1
	3	
onn	1	
la	1	1
	1	
	1	
	3	
hio	1	
ans	1	
nio	3	
y	1	1
	1	
	3	
Ind		2
	1	
ass	1	
	1	
	2	
ex	2	
d		2
a	1	
a	4	
		1
nn	1	
ns	1	
Los Angeles, Calif	6	
Louisville, Ky	1	
Lowell, Mass	1	
Lynn, Mass	1	
Martinsburg, W. Va	1	
Memphis, Tenn	3	4
New Orleans, La	4	
Newton, Mass	1	
New York, N. Y	10	4
Norristown, Pa	1	
Norwalk, Conn	1	
Oil City, Pa	1	
Philadelphia, Pa	9	3
Pueblo, Colo	1	
Reading, Pa	1	
Richmond, Va	3	
Saginaw, Mich	1	
St. Louis, Mo	1	
Salem, Oreg	2	
Savannah, Ga	7	
Seattle, Wash	1	
Troy, N. Y	1	1
Tuscaloosa, Ala	1	
Washington, D. C	1	
Waterbury, Conn	1	
Wilkinsburg, Pa	1	
Wilmington, N. C		2
Worcester, Mass	1	
Youngstown, Ohio		1
Zanesville, Ohio		1

TYPHUS FEVER.

New York, N. Y., Week Ended May 17, 1919.

the week ended May 17, 1919, one death from typhus reported in New York, N. Y.

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Chicopee, Mass.	29,950	7							5	1
Chillicothe, Ohio	15,625	5					4			1
Cincinnati, Ohio	414,248	102	6	1	41		40	1	17	14
Cleveland, Ohio	692,259		22	2	68		7		37	16
Clinton, Mass.	[1] 13,075	2	1						1	
Coatesville, Pa.	14,998				3					
Coffeyville, Kans.	18,331				2					
Cohoes, N. Y.	25,292	3					1		1	1
Colorado Springs, Colo.	38,965	12					2		2	8
Columbia, S. C.	35,165		1							
Columbus, Ohio	220,135	63	3	1	7		3		6	7
Concord, N. H.	22,858	9			1		1		2	2
Council Bluffs, Iowa	31,838	10	2		1		5			1
Covington, Ky.	59,623	18	1				1		1	3
Cranston, R. I.	26,773	2					1			
Cumberland, Md.	26,686	5	2		7		3		3	
Dallas, Tex.	129,738	26			1		1		6	
Danbury, Conn.	22,931	9	1				2			
Danville, Ill.	32,909				25					
Danville, Va.	20,183	2								
Davenport, Iowa	49,618		3	1						
Dayton, Ohio	128,939	27	2		2				3	
Dedham, Mass.	10,618	1			1					
Denver, Colo.	268,439	52	7		33		14			10
Des Moines, Iowa	104,052		2		1		7			
Detroit, Mich.	619,648	182	47	2	64	1	52	3	72	22
Dover, N. H.	13,276	7					2		1	
Du Bois, Pa.	14,994				1		3			
Dubuque, Iowa	40,096		2				2			1
Duluth, Minn.	97,077	40	9		63		5		4	3
Durham, N. C.	26,160	5			2				3	
East Chicago, Ind.	30,286	6								
East Cleveland, Ohio	13,864				1		1			
Easthampton, Mass.	10,656		2							
Easton, Pa.	30,854		2		3		1			
East Orange, N. J.	43,761	5	6		1		2		2	
East Providence, R. I.	18,485		1							
East St. Louis, Ill.	77,312		1		1		1			
Elgin, Ill.	28,562	5	1	1	2		3			
Elizabeth, N. J.	88,830		1		1		14		6	4
Elmira, N. Y.	38,272				3					
El Paso, Tex.	60,149	42					1			3
Englewood, N. J.	12,603	2			2		3		1	
Eureka, Calif.	15,142	5								
Evanston, Ill.	29,304	3			92					
Evansville, Ind.	76,981	19	1				2			1
Everett, Mass.	40,160	9		1	4		2			1
Everett, Wash.	37,205				1		1			
Fairmount, W. Va.	16,111				9					
Fall River, Mass.	129,828	32	2		79	5	3		6	1
Fargo, N. Dak.	17,872	7			33		2			
Farrell, Pa.	16,190				1					
Findlay, Ohio	14,858	2			21					1

[1] Population Apr. 15, 1910.

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Marinette, Wis.	[1] 14,610	3			6		1			
Marion, Ind.	19,923	9					1			1
Marion, Ohio	24,129						1			
Marlboro, Mass.	15,285	3							2	
Marshalltown, Iowa	14,519				1					
Martinsburg, W. Va.	12,984				6		9			
Mason City, Iowa	14,938	11								
Meadville, Pa.	13,968						1			
Medford, Mass.	26,681	10	1				1		2	1
Melrose, Mass.	17,724	4	1				3			
Memphis, Tenn.	151,877		47		37	3	8		9	5
Meriden, Conn.	29,431		2				1		1	
Methuen, Mass.	14,320	6	1				1			
Middletown, N. Y.	15,890		1				1		1	
Middletown, Ohio	16,384	5								2
Milford, Mass.	14,280	6								1
Milwaukee, Wis.	445,008	101	12	3	6		24	1	16	9
Minneapolis, Minn.	373,448	80	19	1	36		21		13	11
Missoula, Mont.	19,075	5							1	
Mobile, Ala.	59,201	19			2		1			4
Moline, Ill.	27,976	1	3							1
Monessen, Pa.	23,070						2			
Montclair, N. J.	27,087	1	3				2			1
Montgomery, Ala.	44,039	15			1					
Morgantown, W. Va.	14,444	2					1			
Morristown, N. J.	13,410	2					1			
Moundsville, W. Va.	11,513	2								
Mount Carmel, Pa.	20,709				7					
Mount Vernon, N. Y.	37,991	9							2	
Muscatine, Iowa	17,713	1								
Muskogee, Okla.	47,173						1			
Nanticoke, Pa.	23,811				2					
Nashua, N. H.	27,541	13	1				2			
Nashville, Tenn.	118,136	45			11		7		5	6
Newark, N. J.	418,789	98	32		7		32		23	13
New Bedford, Mass.	121,622	27	1	1	10		6		7	2
New Britain, Conn.	55,385	11			5	1	2			2
New Brunswick, N. J.	25,855		3		1		2		1	
Newburgh, N. Y.	29,893	10					2		3	4
Newburyport, Mass.	15,291	4	1							
New Castle, Pa.	41,915						4			
New Haven, Conn.	152,275	42	6		2		6		6	4
New London, Conn.	21,199	10	1		1					1
New Orleans, La.	377,010	119	5		7		4		17	6
Newport, Ky.	32,133	6					2			
Newport, R. I.	30,585	2					2			
Newton, Mass.	44,345	3	1		1				2	
New York, N. Y.	5,737,492	1,354	378	32	257	7	115	4	215	144
Niagara Falls, N. Y.	38,466	10			3		5			
Norfolk, Va.	91,148		2		4		1			
Norristown, Pa.	31,969				18		1			
North Adams, Mass.	[1] 22,019	9								
Northampton, Mass.	20,006	8					1			
North Tonowanda, N. Y.	14,060	3				4				
Norwalk, Conn.	27,332	2	1						1	
Norwich, Conn.	21,923	1							1	1

[1] Population Apr. 15, 1910.

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Shamokin, Pa.	21,274	.....	2	.....	7	.....	.....	.....	.....	.....
Sharon, Pa.	19,156	.....	.....	.....	3	.....	.....	.....	.....	.....
Sioux City, Iowa.	58,568	.....	.....	.....	.....	.....	4	.....	.....	.....
Sioux Falls, S. Dak.	16,887	3	.....	.....	3	.....	.....	.....	.....	.....
Somerville, Mass.	88,618	25	2	.....	.....	.....	6	.....	7	1
South Bend, Ind.	70,983	14	1	.....	8	.....	2	.....	.....	.....
Southbridge, Mass.	14,465	3	.....	.....	.....	.....	.....	.....	1	.....
Spartanburg, S. C.	21,985	5	.....	.....	.....	.....	.....	.....	.....	1
Spokane, Wash.	157,656	.....	.....	.....	1	.....	5	.....	.....	.....
Springfield, Ill.	62,623	19	1	.....	1	.....	1	.....	.....	.....
Springfield, Mass.	108,668	37	2	.....	.....	.....	1	.....	6	3
Springfield, Mo.	41,169	14	.....	.....	.....	.....	.....	.....	.....	2
Springfield, Ohio.	52,296	12	1	.....	18	.....	.....	.....	.....	2
Steelton, Pa.	15,759	.....	.....	.....	6	.....	.....	.....	1	.....
Steubenville, Ohio.	28,259	8	1	.....	.....	.....	.....	.....	.....	.....
Stillwater, Minn.	[1] 10,198	.....	1	.....	.....	.....	.....	.....	.....	.....
Stockton, Calif.	36,209	6	2	.....	.....	.....	.....	.....	.....	.....
Streator, Ill.	14,313	9	.....	.....	.....	.....	.....	.....	.....	.....
Sunbury, Pa.	16,661	.....	.....	.....	.....	.....	1	.....	.....	.....
Superior, Wis.	47,167	5	1	.....	1	.....	2	.....	.....	2
Syracuse, N. Y.	158,559	42	6	2	.....	.....	6	1	5	2
Tacoma, Wash.	117,446	.....	.....	.....	10	.....	5	.....	.....	.....
Taunton, Mass.	36,610	8	.....	.....	15	.....	4	.....	.....	1
Toledo, Ohio.	202,010	.....	2	.....	107	.....	6	.....	3	10
Topeka, Kans.	49,538	7	1	.....	1	.....	.....	.....	.....	.....
Trenton, N. J.	113,974	35	.....	.....	32	.....	.....	.....	7	4
Troy, N. Y.	78,094	21	2	.....	.....	.....	.....	.....	5	3
Tuscaloosa, Ala.	10,824	1	1	.....	.....	.....	.....	.....	2	.....
Uniontown, Pa.	21,600	.....	.....	.....	.....	.....	1	.....	.....	.....
Virginia, Minn.	15,954	.....	1	.....	.....	.....	.....	.....	.....	.....
Wakefield, Mass.	12,947	7	.....	.....	.....	.....	.....	.....	1	1
Walla Walla, Wash.	26,067	.....	.....	.....	.....	.....	6	.....	.....	.....
Waltham, Mass.	31,011	6	1	.....	.....	.....	1	.....	1	1
Warren, Pa.	15,083	.....	.....	.....	1	.....	.....	.....	.....	.....
Washington, D. C.	369,282	102	23	3	7	.....	22	1	13	9
Washington, Pa.	22,076	.....	.....	.....	1	.....	.....	.....	.....	.....
Waterbury, Conn.	89,201	1	3	1	20	.....	7	.....	2	.....
Watertown, Mass.	15,188	1	.....	.....	.....	.....	.....	.....	.....	.....
Wausau, Wis.	19,666	7	.....	.....	1	.....	3	.....	.....	1
West Chester, Pa.	13,403	.....	.....	.....	.....	.....	4	.....	.....	.....
Westfield, Mass.	18,769	2	.....	.....	.....	.....	3	.....	.....	.....
West Hoboken, N. J.	44,386	5	3	.....	1	.....	.....	.....	1	.....
West New York, N. J.	19,613	5	2	1	.....	.....	.....	.....	1	1
West Orange, N. J.	13,964	5	3	.....	1	.....	2	.....	1	.....
Wheeling, W. Va.	43,657	.....	.....	.....	.....	.....	.....	.....	1	2
White Plains, N. Y.	23,331	8	.....	.....	.....	.....	.....	.....	.....	.....
Wichita, Kans.	73,597	20	2	.....	.....	.....	.....	.....	2	1
Wilkes-Barre, Pa.	78,334	.....	1	.....	10	.....	.....	.....	.....	.....
Wilkinsburg, Pa.	23,809	.....	3	.....	.....	.....	.....	.....	2	.....
Williamsport, Pa.	34,123	.....	3	.....	1	.....	.....	.....	.....	.....
Wilmington, Del.	95,369	29	1	1	1	.....	1	.....	.....	.....
Wilmington, N. C.	30,400	13	.....	.....	2	.....	.....	.....	.....	3
Winchester, Mass.	10,812	1	.....	.....	.....	.....	.....	.....	.....	.....
Winona, Minn.	[1] 18,583	7	.....	.....	5	.....	.....	.....	.....	.....
Winston-Salem, N. C.	33,136	9	.....	.....	24	.....	1	.....	1	1
Winthrop, Mass.	13,105	.....	.....	.....	.....	.....	1	.....	1	.....
Woburn, Mass.	16,076	2	.....	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass.	165,106	48	.....	.....	60	2	2	.....	4	5
Yakima, Wash.	22,058	.....	.....	.....	.....	.....	2	.....	1	.....
Yonkers, N. Y.	103,066	18	.....	.....	6	.....	3	.....	.....	4
York, Pa.	52,770	.....	.....	.....	2	.....	4	.....	.....	.....
Youngstown, Ohio.	112,282	26	3	1	46	.....	4	.....	3	.....
Zanesville, Ohio.	31,320	6	.....	.....	.....	.....	.....	.....	.....	2

[1] Population Apr. 15, 1919.

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Nanking	Apr. 13-19			Do.
Denmark:				
Copenhagen	Mar. 17-Apr. 5	32		
Finland				Mar. 1-31, 1919: Cases, 265.
Provinces—				
Abo Och Björneborg	Mar. 1-31	10		
Kuopio	do	68		
Nyland	do	4		
St. Michael	do	49		
Tavastehus	do	1		
Vasa	do	5		
Viborg	do	128		
France:				
Paris	Apr. 13-19	1		
Greece:				
Saloniki	Feb. 16-Apr. 5		39	
India:				
Madras	Apr. 13-19	46	17	
Indo-China:				
Cochin-China—				
Saigon	Mar. 30-Apr. 6	23	6	
Japan:				
Kobe	Apr. 6-19	57	30	
Newfoundland:				
St. Johns	May 10-16	5		Outports, 6 cases.
Philippine Islands:				
Manila	Mar. 29-Apr. 5	1		
Spain:				
Cadiz	Mar. 1-31		9	
Madrid	do		7	
Seville	do		1	
Valencia	Mar. 29-Apr. 26	226	16	

TYPHUS FEVER.

Finland				Mar. 1-31, 1919: Cases, 17.
Provinces—				
Abo Och Björneborg	Mar. 1-31	10		
Nyland	do	6		
Uleaborg	do	1		
Greece:				
Saloniki	Feb. 16-Apr. 5		29	
Mesopotamia:				
Bagdad	Mar. 14-21	5		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 30, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17-30	4	5	
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13-19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18-Dec. 28	1,351	1,031	
Do	Dec. 29-Mar. 22	9,686	8,510	
Calcutta	Sept. 20-Dec. 21		241	Reports for weeks ended Nov. 2, 1918, and Mar. 29, 1919, missing.
Do	Dec. 28-Apr. 5		1,184	
Karachi	Jan. 26-Mar. 22	3	3	
Madras	Oct. 5-Dec. 28	264	164	Oct. 27-Nov. 2, 1918. Cases 7 deaths, 4.
Do	Jan. 5-Mar. 29	430	269	
Rangoon	Oct. 5-Dec. 21	36	35	
Do	Dec. 29-Mar. 22	41	33	
Indo-China				July 1-Oct. 31, 1918: Cases, 728, deaths, 672.
Anam	July 1-Aug. 31	37	30	
Cambodia	July 1-Oct. 31	324	171	
Cochin China	do	486	327	
Saigon	Oct. 7-Dec. 22	75	45	
Do	Dec. 3-Mar. 23	456	267	
Kwang-Chow-Wan	July 1-31	50	34	
Tonkin	July 1-Oct. 31	6		
Java:				
East Java				Oct. 7-Dec. 31, 1918: Cases, 833, deaths, 533. Jan. 1-Mar. 17, 1919: Cases, 756, deaths, 519.
Surabaya district	Oct. 7-Dec. 31	656	423	
Do	Jan. 1-Mar. 17	387	282	
Mid-Java				Sept. 23-Dec. 14, 1918: Cases, 2,362; deaths, 2,014. Jan. 26-Feb. 22, 1919: Cases, 1,128; deaths, 886.
Samarang	Sept. 26-Oct. 16	120	111	
West Java				Oct. 3-Dec. 11, 1918: Cases, 452; deaths, 338. Dec. 27, 1918-Jan. 23, 1919: Cases, 10; deaths, 1.
Batavia	Oct. 3-Dec. 11	291	149	
Do	Dec. 27-Jan. 23	8	2	
Cheribon	Jan. 3-9	1		
Mesopotamia:				
Bagdad	Oct. 11-18	8		
Philippine Islands:				
Manila	Sept. 22-Dec. 28	209	135	
Do	Dec. 29-Mar. 29	25	13	
Do	Apr. 6-12	4	1	
Provinces				Nov. 2-Dec. 28, 1918: Cases, 1,358, deaths, 1,515. Dec. 29, 1918-Mar. 29, 1919: Cases, 1,332, deaths, 917. Apr. 6-12, 1919: Cases, 53; deaths, 37.
Albay	Dec. 15-21	1	1	
Ambos Camarines	Feb. 15-21	10	2	
Bataan	Nov. 17-Dec. 28	38	32	
Batangas	Nov. 2-Dec. 28	253	220	
Do	Dec. 29-Mar. 29	71	55	
Do	Apr. 6-12	5	2	
Bohol	Nov. 2-Dec. 28	29	26	
Do	Dec. 29-Mar. 29	88	55	
Do	Apr. 6-12	10	6	
Bulacan	Oct. 12-Dec. 28	51	8	
Do	Dec. 29-Feb. 21	42		
Capiz	Dec. 22-28	7	5	
Do	Jan. 5-26	28	14	
Cavite	Oct. 27-Dec. 21	207	115	
Do	Dec. 29-Jan. 25	17	16	
Cebu	Nov. 10-Dec. 21	50	27	
Do	Jan. 12-18	13	12	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 15	56	38	
Iloilo	Oct. 22-Dec. 28	113	70	
Do	Jan. 5-Mar. 29	186	118	
Do	Apr. 6-12	2	1	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Mar. 29	142	99	
Do	Apr. 6-12	7	6	
Lanao	Jan. 5-11	8	6	
Mindoro	Nov. 21-30	7	14	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-Mar. 29	194	8	
Nueva Ecija	Jan. 12-25	9	6	

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)LERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 30, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
pine Islands—Contd				
ovinces—Continued.				
Occidental Negros	Feb. 2-Mar. 21	8	5	
Oriental Negros	Nov. 2-Dec. 7	32	18	
Do	Jan. 5-Feb. 8	35	22	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Mar. 29	51	38	
Do	Apr. 6-12	28	21	
Pangasinan	Nov. 2-Dec. 28	930	652	
Do	Dec. 29-Mar. 29	167	129	
Do	Apr. 6-12	1	1	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-Feb. 8	44	36	
Tayabas	Nov. 2-Dec. 28	64	31	
Do	Nov. 10-Dec. 28	54	26	
Do	Dec. 29-Feb. 15	69	62	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-Feb. 8	25	21	
isk district	Oct. 2-Nov. 27	5	.....	
saw	Sept. 29-Oct. 26	5	1	
ograd	To July 16	3,388	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals: In military hospitals, July 5-Aug. 21, 1918: Cases, 884; deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 279.
erinaslav	Sept. 1-20	7	6	
sa	.....do	25	.....	Sept. 1-20, 1918: 11 cases on s. s. Helena.

PLAGUE.

ibo	Oct. 27-Nov. 2	1	1	
o	Feb. 9-Mar. 22	13	10	
	Nov. 24-Dec. 8	.....	.....	Present.
gking	Dec. 1-7	.....	.....	Do.
Ning district	Mar. 15	.....	.....	Do.
kong	Oct. 1-Dec. 28	4	4	
o	Jan. 1-May 17	83	80	
	Feb. 16-Mar. 16	2	1	
iquil	July 1-Dec. 31	20	7	
o	Jan. 1-Apr. 15	55	17	
	Dec. 16-31	1	1	
				Jan. 1-Nov. 21, 1918: Cases, 357; deaths, 153. Jan. 1-Apr. 10, 1919: Cases, 130; deaths, 96.
exandria	Mar. 23	1	1	
ez	Jan. 31-Apr. 7	40	26	
ices—				
siout	Feb. 24-Apr. 5	.....	9	1 septicemic.
rgeh	Feb. 22-Mar. 22	10	5	2 pneumonic.
nieh	Feb. 21-27	2	2	1 pneumonic.
				Sept. 23-Dec. 28, 1918: Cases, 24,279; deaths, 18,369. Dec. 29, 1918-Mar. 1, 1919: Cases, 25,506; deaths, 19,401. Mar. 9-15, 1919: Cases, 13,981; deaths, 5,402.
ay	Aug. 18-Dec. 28	41	29	
	Jan. 12-Mar. 22	68	52	
a	Dec. 22-28	.....	1	
	Jan. 12-Apr. 5	.....	83	
il	Oct. 19-Dec. 28	17	17	
	Dec. 29-Apr. 12	55	44	
	Dec. 8-28	26	17	
	Dec. 29-Apr. 5	206	117	
Presidency	Oct. 13-Dec. 28	1,152	774	Oct. 27-Nov. 2, 1918; Cases, 142; deaths, 38.
	Dec. 29-Mar. 8	2,562	1,736	
n	Oct. 5-Dec. 21	84	81	
	Dec. 29-Mar. 22	230	220	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 30, 1919—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China				July 1-Oct. 21, 1918: Cases, [illegible] deaths, 146.
Anam	July 1-Oct. 31	42	36	
Cambodia	do	72	72	
Cochin-China	do	65	35	
Saigon	Oct. 7-Nov. 24	5	1	
Do	Jan. 13-Mar. 23	14	10	City and vicinity.
Kwang-Chow-Wan	July 1-31	1	1	
Java:				
East Java				Oct. 7-Nov. 10, 1918: Cases, [illegible] deaths, 103. Jan. 1-Feb. 2, 1919: Cases, 179; deaths, 179.
Surabaya (district)	Oct. 7-Dec. 31	92	92	
Do	Jan. 1-Feb. 26	49	49	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, [illegible] deaths, 14. Jan. 30-Feb [illegible], 1919: Cases, 135; deaths, 134.
Samarang	Sept. 25-Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16-29	5	2	
Do	Feb. 22-Mar. 14	65	29	
Siam:				
Bangkok	Sept. 21-Oct. 12	6	5	
Do	Jan. 19-Feb. 22	7	6	
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.
S. S. Sparta	May 21	1	1	At Liverpool, England, from Bombay.

SMALLPOX.

Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
Do	Mar. 1-31	1	1	
Austria				Dec. 1, 1918-Jan. 11, 1919: Cases, 68. Jan. 12-Feb. [illegible], 1919: Cases, 57.
Vienna	Dec. 1-Jan. 11	6		
Bohemia				Feb., 1919: Reported prevalent. March, 1919: Cases, 57.
Gablonz	Mar. 1-31	36		
Brazil:				
Rio de Janeiro	Dec. 1-28	46	19	Oct. 6-12, 1918: Cases, 12, deaths, 10.
Do	Dec. 30-Jan. 25	25	11	
Sao Paulo	Mar. 3-16		2	
British East Africa:				
Mombasa	Sept. 1-Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-18	2		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 22	6		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 10			Do.
Cape Sable Island	May 13			Present on south side.
Digby	Jan. 4			Present.
Halifax	Dec. 7-28	10		
Do	Jan. 5-May 10	317		
Middleton	Dec. 29-Jan. 4			Do.
Sydney	Jan. 5-Mar. 8	4		
Do	Mar. 23-May 10	10		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-Apr. 12	13		
Toronto	Feb. 2-15	2		
Do	Mar. 16-22	1		
Prince Edward Island—				
Charlotte Town	Feb. 27-Apr. 16	2		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-May 10	32		
Paspebiac	Jan. 12-Mar. 8	8		
Quebec	Dec. 15-21	1		
Do	Dec. 28-May 10	21		

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ERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 30, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
mbo	Jan. 12-Mar. 29	4		Present.
y	Oct. 13-Dec. 28			Do.
Do	Mar. 11-Apr. 7	4	3	Do.
ng	Feb. 10-16	1		
Do	Feb. 24-Mar. 2	1		
on	Nov. 17-23			Do.
Do	Feb. 9-15			Do.
gsha	Mar. 16-23	3		
gking	Nov. 10-Dec. 28			Do.
Do	Jan. 5-Mar. 29			Do.
how	Nov. 24-Dec. 28			Do.
Do	Dec. 29-Feb. 28			Do.
gkong	Dec. 15-21	1	1	
Do	Feb. 2-8	1		
Do	Feb. 16-Mar. 29	7	2	
ring	Dec. 1-28			Do.
Do	Dec. 29-Apr. 11			Do.
ghai	Jan. 20-26	1		
gtau	Mar. 3-9	1		
Korea):				
ulpo	Nov. 1-Dec. 31	15	4	
Do	Jan. 1-Feb. 28	15	6	
n	Feb. 1-28		5	
l	do	1		
:				
nquilla	Apr. 6-12		1	
:				
nhagen	Nov. 9-Dec. 28	12		
Do	Dec. 29-Mar. 15	69		
ndria	Dec. 17-23	1	1	
Do	Jan. 22-Apr. 22	26	10	
nces				Jan. 1-31, 1919: Cases, 279.
bo Och Björneborg	Jan. 1-31	47		
uopio	do	47		
y land	do	2		
t. Michael	do	51		
avastehus	do	4		
lenborg	do	1		
asa	do	1		
iborg	do	126		
nces				Feb. 1-28, 1919: Cases, 234.
bo Och Björneborg	Feb. 1-28	23		
uopio	do	54		
y land	do	15		
. Michael	do	29		
avastehus	do	4		
iborg	do	118		
aux	Feb. 8-13		1	
	Feb. 2-8	1		
	Mar. 2-Apr. 12	12	3	
en				Nov. 24-Dec. 7, 1918: Cases, 34.
	Nov. 24-Dec. 7	18		
	do	4		
and	do	1		
sberg	do	8		In persons evacuated from the Ukraine.
ditz	do	1		
	do	1		
	do	1		
Chapelle (district)	Dec. 8-Jan. 11	17		Dec. 8, 1918-Jan. 11, 1919: Cases, 177. Additional cases reported later, 54, for week ended Jan. 11.
	do	10		
	do	3		
hal	do	8		District of Gumbinnen.
n	Dec. 8-Feb. 15	247		26 additional cases reported later at Dresden.
	Dec. 8-Jan. 11	5		
er	do	7		Among interned Russians.
sberg	do	15		
vitz	do	5		
le	do	6		
	do	4		District of Dresden.

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Saigon	[illegible]	[illegible]	[illegible]	
Do	Dec. 30–Mar. 23	93	15	City and vicir
Tonkin	July 1–Oct. 31	20	1	
Italy:				
Andria	Mar. 10–16	1		Province of B
Barletta	Mar. 3–9	2		Do.
Genoa	Jan. 9–Mar. 15	4	2	
Lecce (Province)	Feb. 17–23	2		
Leghorn	Apr. 14–30	1		
Messina	Mar. 2–30	4		Cases reporte
Naples	Mar. 10–16	2		ties in Provi
Palermo	Jan. 31–Apr. 16	53	2	
Turin	Jan. 27–Mar. 23	9	2	
Japan:				
Kobe	Oct. 26–Dec. 28	186	46	
Do	Dec. 29–Mar. 22	499	165	
Nagasaki	Mar. 31–Apr. 6	3		
Nagoya	Mar. 2–15	2		
Taihoku	Jan. 15–Apr. 15	151	18	Island of Form
Yokohama	Jan. 20–26	1		
Java:				
East Java				Oct. 7–Dec. 3
Surabaya (district)	Oct. 7–Dec. 31	16		deaths, 1.
Do	Jan. 1–Feb. 25	4	2	Cases, 4; de
Mid-Java				Sept. 25–Dec.
				deaths, 3.
				Case, 1.
West Java				Oct. 2–Dec. 1
Batavia	Oct. 2–Dec. 11	185	151	deaths, 263.
Do	Dec. 27–Mar. 27	49	27	Mar. 27,
				deaths, 99.
Lithuania				Sept. 1–Oct. 1
Manchuria:				
Dairen	Jan. 15–21	1		
Do	Feb. 22–Apr. 14	4	2	
Mesopotamia:				
Bagdad	Oct. 11–Dec. 27	308	97	
Do	Dec. 28–Feb. 9	8		
Mexico:				
Ciudad Juarez	Nov. 24–30	1		
Guadalajara	Mar. 1–31	1		
Do	Mar. 29–Apr. 5	1		
Mexico City	Sept. 22–Dec. 28	23		
Do	Dec. 29–May 3	28		
Vera Cruz	Feb. 10–Apr. 12	2	1	
Newfoundland				Outports—Dec
St. Johns	Dec. 6–20	4		78. Dec. 28,
Do	Jan. 24–May 9	37		Cases, 391.
Panama				Aug. 1–31, 191
Colon	Dec. 15–21	1		curring at Co
Do	Dec. 29–Feb. 9	8		points in th
				1–25, 1919: Ca
Philippine Islands:				
Manila	Nov. 2–16	5	3	
Do	Dec. 29–Apr. 12	40	21	Varioloid, 16.

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ERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 30, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
l:				
on	Nov. 16-Dec. 28	843		
rto	Mar. 9-Apr. 26	128	83	
ese East Africa:				
enco Marques				July 1-Oct. 31, 1918: 45 fatal cases.
ivostok	Nov. 1-3	4		
Do	Jan. 17-23		1	
Do	Feb. 1-Mar. 15	16	1	
elona	Jan. 9-Feb. 11		5	
Do	Feb. 19-Apr. 9	2	2	
ao	Jan. 1-Feb. 20	6		
	Oct. 1-Dec. 31	18		
Do	Jan. 1-Feb. 28		26	
id	Sept. 1-Oct. 31	153		
Do	Jan. 1-Feb. 28		74	
le	Nov. 1-Dec. 31		8	
Do	Jan. 1-Feb. 28		4	
ncia	Nov. 10-Dec. 21	40	9	
Do	Dec. 29-Jan. 25	93	10	
Do	Feb. 16-Mar. 29	290	29	
ttlements:				
ng	Oct. 6-12	1		
pore	Feb. 2-22	3		
holm	Feb. 2-8		1	
South Africa:				
Town	Aug. 1-30	1		
o	Dec. 21-Jan. 31	1		
nesburg	Aug. 1-Oct. 31	12		Nov. 1-30, 1918: Cases, 4.

TYPHUS FEVER.

s	Nov. 1-30	1		
ngary:				
a				Dec. 1, 1918-Jan. 11, 1919: Cases, 125. Jan. 12-Feb. 8, 1919: Cases, 157.
nna	Dec. 1-Jan. 11	110		Occurring almost exclusively in repatriated soldiers and their contacts.
	Jan. 12-Feb. 8	119		
ry	Sept. 2-8	2		Sept. 9-Nov. 26, 1918: Cases, 110; deaths, 8. Nov. 27, 1918-Jan. 12, 1919: Cases, 210.
dapest	Sept. 9-Nov. 26	73	2	
Do	Nov. 27-Jan. 12	159		
ssburg	Sept. 9-Nov. 26	11	1	
rnau	Nov. 4-26	1		
tmarnemeti	do	1		Present, county of Bihar.
	Sept. 14-21	1		
Janeiro	Dec. 15-22	2		
	Dec. 29-Feb. 15	28	3	
ulo	Jan. 13-19	3		
	Mar. 10			Present.
uk	do			Do.
	Dec. 2-15	2		
	Jan. 6-Apr. 20	3	1	
rea):				
	Feb. 1-28	1	1	
	Jan. 1-Feb. 28	12	1	
uilla	Nov. 8-Dec. 28		3	
	Jan. 5-Mar. 8	2	3	
iria	Oct. 14-Dec. 31	85	36	
	Jan. 1-Apr. 22	627	163	Confined to one quarter of city and mostly to natives. Oct. 20-Nov. 7, 1918: Cases, 12; deaths, 1.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 30, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Finland:				
Provinces—				
Abo Och Björneborg	Jan. 1-31	24		
Do	Feb. 1-28	19		
Nyland	do	10		
France:				
Marseille	Mar. 1-31		31	Apr. 26, 1919, reported in 2 and 2 military prisons.
Germany:				
Breslau	Sept. 29-Oct. 19	12	8	
Gumbinnen district	Oct. 20-Nov. 7	1		
Dresden	do	1		
Griefswald	do	1		
Godullahutte	do	1		
Königsberg	Sept. 29-Oct. 19	3	1	
Königshutte	Oct. 20-Nov. 7	1	1	
Magdeburg	do	2		
Mostalten	Sept. 29-Oct. 19	7	2	District of Allenstein.
Oppeln district	Oct. 20-Nov. 7	5		
Great Britain:				
Cork	Feb. 2-22	4		
Glasgow	Dec. 22-28	5		
Do	Jan. 5-Feb. 8	9	1	
Do	Mar. 9-15	1		
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-Feb. 15		78	
Italy:				
Bari	Feb. 3-9	19		In soldiers returning from [illegible] ion.
Leghorn	Apr. 14-27	9	2	
Naples	Feb. 3-9	3		
Taranto	do	2		Do.
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-Apr. 20	23	5	
Java:				
East Java				Oct. 7-21, 1918 Cases, 5
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 16, 1918 Cases, 3
West Java				Oct. 2-23: Cases, 21 deaths, 8
Batavia	Oct. 2-23	15	4	
Lithuania				Sept. 1-Oct. 26, 1918 Cases, 288 deaths, 23.
Macedonia:				
Drama	Mar. 17			Present.
Epirus	Mar. 21			Do.
Kavala	Mar. 17	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5-Dec. 27	2		
Do	Dec. 28-Jan. 31	4		
Mexico:				
Aguascalientes	Feb. 2-23		3	
Do	Mar. 24-Apr. 13		4	
Guadalajara	Nov. 1-Dec. 31	4	1	
Do	Jan. 1-Mar. 31	4	2	
Mexico City	Sept. 22-Dec. 28	431		
Do	Dec. 29-May 3	644		
Netherlands:				
Amsterdam	Dec. 8-14	1		
Do	Jan. 12-18	4		
Delft	Feb. 26			Present.
Harlem	do			Do.
Leiden	do			Do.
Limburg	do	5	1	Mining district.
Rotterdam	Feb. 2-Apr. 5	504	89	Jan. 26-Feb. 27, 1919: Cases, 68 deaths, 46.
Schiedam	Feb. 26			Present. Sept. 29-Oct. 26, 1918: Cases, 572; deaths, 28.
Poland:				
Lods	Sept. 29-Oct. 26	55	8	
Warsaw	do	111	13	
Portugal:				
Braga	Mar. 24			
Oporto	Mar. 8-Apr. 26	721		
Russia:				
Archangel	Jan. 15-Mar. 15	233	61	

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LERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to May 30, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
grade	Feb. 5	62		Among soldiers and prisoners.
livostok	Sept. 1-Dec. 30	43		
Do	Jan. 17-Mar. 15	143	15	
lva	Oct. 1-31		2	
rid	Dec. 1-31		1	
is	Apr. 12-25	2	1	
				Apr. 5, 1919: Reported to be spreading.
South Africa: Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

a	Jan. 12-Mar. 1	5	2	
ambuco	Oct. 1-Nov. 30	2	1	
gena	Jan. 29-Feb. 4		4	
hoyo	Nov. 1-30	1		
o	Mar. 1-15	1		
ama	Feb. 1-15	1		
o	Jan. 1-15	1		
	do	1	1	
n	Nov. 1-Dec. 31	3	2	
o	Jan. 16-Mar. 15	5	1	
aquil	July 1-Dec. 31	326	177	
o	Jan. 1-Mar. 31	124	68	
nda Vainilla	Feb. 16-28	1		
ro	Nov. 1-15	1		
o	Feb. 1-Mar. 15	2	1	
ijal	Nov. 1-15	1	1	
o	Jan. 1-15	1	1	
ijito	Nov. 1-15	1	1	
o	Jan. 1-Feb. 28	2	2	
(Hacienda)	Nov. 1-15	1		
de Piedra	Nov. 1-30	1		
alvador	Jan. 9	1		
amaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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UBLIC HEALTH REPORTS

34 JUNE 13, 1919 No. 24

CONFERENCE OF HEALTH AUTHORITIES.

AND TERRITORIAL HEALTH AUTHORITIES IN ANNUAL CONFERENCE WITH THE UNITED STATES PUBLIC HEALTH SERVICE.

e Seventeenth Annual Conference of State and Territorial h Authorities with the Public Health Service was held on June 4 , 1919, at 228 First Street NW., Washington, D. C., with Surg. Rupert Blue in the chair. Forty-one States were represented conference.

following resolution, indorsing the principle of Federal aid sion in rural sanitation, was unanimously adopted by the ence:

olved, That it is the sense of the conference of the United States Health Service with the State and Territorial health authorities ng in Washington, June 4 and 5, 1919, that on account of the accentuated popular interest in public health work incident examination and findings by draft boards, of widespread al impairment among millions of apparently healthy regis- and because of the present pronounced restlessness of rural overnments for breaking away from their former attitude of rence to adequate measures of human conservation and in aking with or without the guidance of experienced health s, hastily prepared and varied programs of rural health work, e present moment is, of all times, the most opportune and cru- Federal and State health authorities to take steps for assisting ral governments in the development of an economic, efficient, manent system of rural health work; and,

further resolved, That it is the sense of this conference that the ans for insuring the future of rural health work is the Federal ension principle of government (the wisdom and practica- f which has been demonstrated and established in providing er rural needs, as in the matter of post roads, vocational on, and farm life demonstration work), as represented in 845 recently introduced in the present Congress and entitled ural Health Act."

conference dealt primarily with questions involving the re- ation of public health activities following the war. Among jects which were taken up were malaria, child hygiene, prob- interstate health work, control of venereal diseases, public education, the Sanitary Reserve Corps of the Public Health railroad sanitation, and statistics relating to the 1920 census.

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Railroad Administration.

The program of the conference follows:

Opening remarks by the Surgeon General.
Roll call of delegates.
Appointment of committees.

Reports of Standing Committees.

Morbidity Returns.—Dr. Eugene R. Kelley.
Sanitation of Public Conveyances.—Dr. Oscar Dowling.
Rural Sanitation.—Dr. W. S. Rankin.
Trachoma.—Dr. John McMullen.

Special Report.

Progress report of commission appointed by the Surgeon General to st
of sanitary disposal of human excreta in unsewered communities.—P

Address by Judge J. H. Moyle, Assistant Secretary of the Treasury.

New Business.

Malaria:
Its Importance—National and State Problems Involved.
Necessity for Cooperative Plan of Attack Between Federal and Sta
Child Hygiene:
Necessity for a Nation-Wide Program of Child Hygiene by Co
Between the Federal and State Governments.
Statement by Col. W. H. Welch on League of Red Cross Societies.
Problems in Interstate Health Work:
Control of Water Supplies Used in Interstate Traffic.
Control of Interstate Spread of Disease.
Public Health Education—Program for cooperation with States.
The Sanitary Reserve Corps of the Public Health Service:
Discussion of Best Methods of Organization and Usage, with Parti
to State Health Departments.
Problems of Railroad Sanitation.
Discussion to be opened by members of the Committee on Heal
Relief, United States Railroad Administration.
Statistics, 1920 Census.
Control of Venereal Diseases as a National Problem.

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TRINITROTOLUENE POISONING.[1]

ıRL VOEGTLIN, Professor of Pharmacology, C. W. HOOPER, Pathological Physiologist, and J. M. JOHNSON, Physiological Chemist, Hygienic Laboratory, United States Public Health Service.

Results of Experimental Study of Trinitrotoluene Poisoning.

ıe following conclusions were reached from an extensive study ıromic T. N. T. poisoning in dogs. The investigation was, later xtended by work in a large shell-filling plant.

Species susceptibility.—Different species of animals (including) exhibit considerable differences in their resistance to the toxic n of T. N. T. Dogs and cats (probably also men) are far more ıptible than white rats, guinea pigs, and rabbits. For this reason were selected for this work.

Symptoms.—Cyanosis, constipation followed by diarrhea, sal- ın, incoordination, icterus, and anæmia were observed. The al picture very often changes during the course of poisoning. nstance, cyanosis, which is almost always present at the begin- of the intoxication, may disappear later on. A considerable f body weight was observed in some of the animals; in others was a preliminary loss followed by recovery; in a few no change ıoted until shortly before death.

Absorption.—T. N. T. is readily absorbed when administered taneously, dissolved in oil, when given by mouth in gelatin les, and finally, when introduced as dust into the lower air ges. The blood plasma of animals receiving T. N. T. often yields tive Webster test.

Excretion.—The urine of animals gives a positive Webster ithin two or three hours following the administration of T. N. T. ılor of the urine assumes a red appearance, the red disappearing addition of acid. This red color is quite characteristic of urine early stages of the intoxication. The substance which is re- ble for the urinary Webster test is not T. N. T., but a metabol- ·oduct of the latter. In some cases bile removed at necropsy a positive Webster test, indicating that T. N. T. or some of ·ivatives are excreted with the bile. The feces never give a ·e Webster test. It is important to note that whereas the y Webster reaction is very intense at the beginning of the ing, the test is very often negative in the later stages. This ation seems to indicate that the animal body in some unknown ıanges its method of dealing with this poison.

Doses used.—T. N. T. was given to dogs daily (excluding Sun- ɔver long periods and in doses of 5 to 33 milligrams per kilo veight. The minimum toxic dose has not been determined,

[1] Paper read at the annual meeting of the American Federation of Biological Societies in Bal- l., April 24, 1919.

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but it should be definitely stated that it is less than 5 milligrams per kilo (probably less than 180 milligrams for an adult man).

6. *Individual susceptibility.*—A striking feature of T. N. T. poisoning in dogs is the great difference in individual susceptibility to poisoning. An animal receiving 10 milligrams per kilo may show more severe symptoms than other animals receiving 30 milligrams per kilo. It is unlikely that this variation in individual susceptibility is due to differences in absorption. It was furthermore observed that animals with a slight grade of anæmia or of some infection are more susceptible to T. N. T. poisoning.

7. *Tolerance.*—Dogs receiving T. N. T. do not acquire a tolerance to this poison in the sense that they become immune to the toxic action of T. N. T. It was found, however, that, as a rule, the clinical symptoms are much more pronounced after the first few doses than later on. Thus the cyanosis and incoordination may disappear completely in the later stages of poisoning.

8. *Impurities.*—No qualitative or quantitative difference was observed in the toxic action of crude or highly purified T. N. T. The toxicity of the commercial product is due to trinitrotoluene per se and is not increased by the presence of small amounts of impurities.

9. *Prophylactic value of diet.*—Dogs fed on a meat diet are more resistant to T. N. T. poisoning than dogs which are fed white bread and milk. Meat has, therefore, greater prophylactic power than milk, as far as dogs are concerned.

10. *Anæmia and toxic jaundice.*—Every animal subjected to chronic T. N. T. poisoning has developed an anæmia of varying intensity. The following blood changes were observed: A reduction in the total blood volume, the red corpuscle volume, the hemoglobin and the pigment volume; the appearance of nucleated red blood cells and an increase in reticulated blood cells. Anisocytosis is very common, especially during the first few weeks of poisoning. Finally, the number of red blood cells shows a very considerable decrease. It should be emphasized, however, that certain animals may show a normal red-blood cell count at a time when other blood tests give evidence of the presence of a severe degree of anæmia.

Among the urinary changes observed should be mentioned the appearance of bile pigments. A considerable number of animals never show bile pigments in the urine. On the other hand, animals which develop jaundice always give a positive test for bile pigments during the period preceding the appearance of clinical signs of jaundice. Urine from T. N. T. dogs never contains more than traces of albumin, and the Fehling test is only slightly positive at times. No significance should be attached to these findings, as normal dog urine occasionally gives a faint test for protein and sugar.

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1. *Necropsy findings.*—The gross pathological findings at necropsy as follows: Decrease of muscular tissue, degeneration of liver, nic tumor or decrease in size of spleen, occasionally general ıdice. The bone marrow has very often a hyperplastic appear-, while in other instances a fatty marrow is found.

2. *Experimental work on prevention of skin absorption.*[1]—After iderable experimentation, a skin varnish was developed which ars to possess all the desirable features. The varnish is com- d of 6 parts of shellac, 1 part of castor oil, and 24 parts of 95 per alcohol. This varnish when applied to the hands and forearms very easily. The brown film which is thus formed is flexible does not peel off. It is resistant to perspiration and moisture. ther words, it has all the desirable physical properties of a pro- ve varnish. Experiments made on rabbits and on the human with this varnish have demonstrated that the intense local tion caused by the local application of "parazol" can be avoided. reasonable to assume that in a similar way skin absorption of . T. could be prevented. The varnish is very easily removed the skin by means of alcohol.

other method of skin protection has been worked out by changing omposition of the above varnish for the purpose of producing ıpermeable glove. Cotton gloves treated with a varnish of the ring composition: Two parts shellac, 1 part castor oil, and 8 of alcohol, appear to be very satisfactory for use by T. N. T. rs. The texture of the glove remains fairly flexible, the varnish ıot crack and is resistant and impermeable to water.

the suggestion of Dr. Alice Hamilton, a number of T. N. T. ıts were tested as to their efficiency as a wash for T. N. T. rs. It was found that a 10 per cent solution of sodium hydro- te is the best inorganic solvent known at the present time. ext best solvent is sodium sulphite. The solubilities of T. N. T. se solvents at room temperature are as follows: 100 cc. 10 per odium hydrosulphite dissolves 0.128 gram of T. N. T. 100 cc. per cent sodium sulphite dissolves 0.082 gram of T. N. T.

Diagnosis and Measures of Protection and Precaution.

Diagnostic tests for recognition of early poisoning.—Anæmia is tant and early sign of T. N. T. poisoning in animals. It is, re, recommended that an accurate hemoglobin estimation be n all new workers entering a factory where T. N. T. is either ıctured or used for the production of munitions. As a reli- strument for this purpose we recommend the Sahli hemo- meter. The blood of the workers should be tested by means

[1] rk on the protective varnish was carried out by Dr. George F. White under the direction of uthors of this paper.

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of this instrument every 8 to 14 days and workers showing a decrease of 15 to 20 per cent in the hemoglobin below the initial figure should be taken off T. N. T. work.

Work which was carried out in a large shell-filling plant has demonstrated the value of the hemoglobin determination for the recognition of mild poisoning.

Another test which should be made every 8 to 14 days is the examination of the urine for bile pigments. A positive test is sufficient reason to take a worker off T. N. T., as the appearance of bile pigments indicates a serious disturbance in the normal liver function, which may rapidly lead to toxic jaundice. For the bile pigment test we recommend the Huppert test or, when sufficient time is not available, Rosenbach's modification of Gmelin's test. In addition to these tests careful attention ought to be given to the presence of clinical symptoms, such as cyanosis and possibly slight incoordination. This last symptom hitherto has not been described for T. N. T. poisoning in man, but careful examination might reveal its presence in this condition.

2. *Meat and a generous diet.*—The dietary used by T. N. T. workers should be carefully supervised, as the experimental work has shown that the individual resistance to T. N. T. poisoning is dependent, at least to some extent, on the character of the diet. It is suggested that T. N. T. workers eat at least 150 to 200 grams of meat daily besides other nourishing foods.

3. *Elimination of susceptible workers.*—The workers showing abnormal susceptibility should be eliminated. According to the report of the British Medical Research Committee, the abnormal susceptibility of certain workers is entirely due to their abnormally permeable skin. The present investigation has shown that there is a considerable variation in individual susceptibility, which is very probably not due to difference in absorption. However this may be, both views warrant the above-mentioned recommendation.

4. *Skin protection.*—In regard to the relative importance of the absorption of T. N. T. (1) through the skin and (2) the respiratory tract, the work done by Prof. E. B. Phelps and Sanitary Chemist J. Casselman has shown that the conclusion reached by the British investigators, namely, that skin absorption is the principal factor in the production of T. N. T. poisoning in the human, is correct. However, analyses in certain parts of the factory have demonstrated the presence of considerable amounts of T. N. T., a fact which should caution against neglecting proper ventilation of the plants.

As a protection against skin absorption of T. N. T. the use of the shellac-castor oil varnish is recommended, either as a skin varnish or for the purpose of the preparation of inexpensive impermeable

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tton gloves. The varnish is made up according to the following ections: 6 parts of orange shellac are dissolved in 24 parts of rm 95 per cent alcohol. To the resulting solution 1 part of castor is added. The varnish is kept in well stoppered bottles to pre- nt evaporation of the alcohol.

n addition to the use of the varnish or the impregnated cotton ves, the workers should be made to wash their hands and fore- ns with a 10 per cent solution of sodium sulphite before leaving factory.

trial of the sulphite wash in a shell-filling plant has demon- ted that the workers are very anxious to use this prophylactic. mical analysis has shown that a considerable amount of T. N. T. be removed from the human skin by this solvent, even after the has been thoroughly washed with soap and water.

Exclusion of anæmic workers.—Workers who show a slight le of anæmia or any other symptoms which would indicate a ered body resistance, should be rigidly excluded from contact T. N. T.

ne authors acknowledge excellent assistance rendered in this in- igation by Drs. White and Mendenhall, Misses Crane, Connell, Wright.

ne detailed report will appear in the near future as a Hygienic oratory Bulletin.

MEDICAL SOCIAL SERVICE FOR NURSES.

e rapid extension of clinic service in connection with the control nereal diseases, and the recognized importance of skilled follow-up from every clinic, have led to the preparation of a special e in medical social service for graduate nurses.

is course has been arranged by the Public Health Service, in ration with Columbia University, Bellevue Hospital, and the York School of Social Work. Provision for 15 scholarships has made by the American Red Cross.

course opens on July 1 and will continue for approximately nonths. Its aim is to offer to qualified women who have had ientific training of graduate nurse a view of the social problems d in the control of venereal diseases. Already health depart- have asked that at the completion of this course the graduate be assigned to the departments for duty.

Columbia University the course will be offered in connection he summer's session at Teachers College, department of nurs- d health. Since there is not in existence a group of teachers special field is this—the social backgrounds of venereal dis- —the speakers will be drawn from the ranks of those who have

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be given by Dr. Keyes.

After the opening of the summer session at Columbia, s
attend certain lectures of the regular course at Teachers
which university credit may be claimed, as well as the
tures on the social relationships of the venereal diseas
These special lectures will include a study of the cause
economic, of venereal diseases, and prevalence and di
these diseases so far as authentic information is av
study of causes will include: The racial tendencies, c
home and family life, defective education, the nature
and diversions offered for the leisure of young people,
community standards, conditions of country and city, a
lems of adolescence, low mentality, drug taking, alcohol

Another theme of the entire course is that of control
tion of venereal diseases by administrative and educat
Legislation—Federal, State, and municipal—in its vario
forms, and methods of enforcing legislation, together w
problems that arise as a result, will be considered. A cl
tion will be given of the organization and functions of
of health—State or local—and of the United States P
Service and the special interrelationships of these de
the control of venereal diseases will be emphasized.

Methods of education and suitable and effective me
licity find a place on the program. A course of medical
be given by Dr. Keyes, discussing more in detail the cl
of the venereal diseases, and their treatment and con
clinics and follow-up work.

The closing weeks of the course will be spent in inten
social service in the clinics of Bellevue Hospital. Und
tion of the Social Service Department of the Hospital,

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given opportunity to study methods of social service in related ics, and to see, in the mass, illustrations of such problems as the arried mother, the feeble-minded, and the handicapped child se condition is potentially or actually related to the immediate blem of venereal diseases. The new clinic for venereal diseases, being established at Bellevue Hospital, will be available for ial intensive study by students of the course. The clinical erial in this department is hardly to be surpassed elsewhere in country.

roughout the season special conferences will be held from time me with the supervising nurse of the Division of Venereal Dis-s, United States Public Health Service.

rther information concerning the terms of admission and the ns of securing scholarships may be had from Asst. Surg. Gen. . Pierce, Division of Venereal Diseases, United States Public th Service, 228 First Street NW., Washington, D. C.

MMARY OF THE APRIL REPORT OF THE DIVISION OF VENEREAL DISEASES, PUBLIC HEALTH SERVICE.

Medical Activities.

e Government and Red Cross clinics of the extra-cantonment have gradually been transferred to the State boards of health, are being operated under the plan for nation-wide control of eal diseases which is being carried out under the provisions of hamberlain-Kahn Act.

ports received from 67 of the 250 free venereal disease clinics ted under the joint supervision of the Public Health Service he State boards of health show that there were 3,468 new cases nereal diseases admitted during the month of April. These dmissions were classified as follows: One thousand six hundred orty-three cases of gonorrhea, 1,501 of syphilis, 144 of chan- 6 of balanitis gangrenosa, and 174 cases of other venereal ions.

total number of patients discharged during this period as no a menace to the public health was 1,071. Of this number, ere discharged as cured, 747 as probably cured, and 184 as non-ious but not cured. The term "probably cured" is used in scharging of all syphilitic and gonorrheal patients, while those ed for treatment against their own volition are discharged as nfectious but not cured," or, when they become no longer a e to the public health.

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Number of States cooperating in showing the "Keeping Fit" exhibit boys.....

Number of lectures, conferences, motion-picture film showings reported

Legislation.

Bills providing appropriations for combating venereal diseases have been passed in the following States:

Arizona	$4,500.00	New Hampshire	
Arkansas	34,237.48	New Jersey	
California (V. D. control)	51,600.00	New York	
California (Women's Reformatory)	150,000.00	North Carolina (annually)	
Colorado	17,000.00	North Dakota	
Colorado (Det. Home)	35,000.00	Ohio	
Connecticut	24,000.00	Oklahoma	
Delaware	2,500.00	Oregon	
Florida (annually)	12,000.00	South Carolina	
Indiana	29,360.20	South Dakota	
Iowa (annually)	15,000.00	Texas (appro. last yr.)	
Kansas (misc. appro. applying to V. D. control)	105,550.00	Utah	
Maine	8,000.00	Washington (V. D. control)	
Michigan	300,000.00	Washington (Women's formatory)	
Minnesota	60,000.00	West Virginia (annually)	
Montana	8,177.42	Wisconsin	
Nebraska	25,925.50	Wyoming	

Mississippi, Kentucky, Louisiana, Maryland, and Virginia have year. The Georgia Legislature meets in June, 1919; the Florida Legisl April 5, 1919; Alabama, after 30 days' session, recessed until July 1.

The following acts bearing on venereal diseases have

Alabama: Injunction and abatement act, ouster law, venereal dis riage, State board of control.

Arkansas: Vice-repressive act, women's prison farm.

California: Venereal disease-control act, women's industrial farm, tising act.

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olorado: Venereal disease-control, women's detention home with appropriation of ,000, act prohibiting sales of venereal-disease drugs except on prescription of ysician.
elaware: Injunction and abatement act, venereal disease-control act.
lorida: Venereal disease-control act.
owa: Venereal disease bar to food handlers, venereal disease-control act, reorganiz- State board of health, sale of venereal-disease drugs prohibited without prescrip- of physician, requiring permit to operate dance halls, soft drink emporiums, etc. side incorporated cities, prohibiting venereally infected person from working in r factories.
issouri: Reorganization State board of health.
ontana: Venereal disease-control act.
ebraska: Venereal disease-control act.
ew Mexico: Creating a State board of health.
ew York: Venereal disease-control act.
rth Carolina: Vice-repressive act, injunction and abatement act, venereal disease- rol act.
rth Dakota: Vice-repressive act, venereal disease-control act.
io: Examination of food handlers, reorganization of State board of health.
klahoma: Venereal disease-control act, venereal disease-advertising act, medical ficate for marriage qualification, act prohibiting sales of venereal-disease drugs pt on prescription of physician.
regon: Venereal disease-control act, act prohibiting sales of venereal-disease drugs pt on prescription of physician, act prohibiting owners from permitting quack real-disease advertisements to remain on their property.
ode Island: Vice-repressive act.
uth Carolina: Venereal disease-control act.
uth Dakota: Venereal disease-control act.
ah: Venereal disease-control act, act prohibiting venereal-disease advertising, rohibiting sales of venereal-disease drugs except on prescription of physician.
shington: Venereal disease-control act, women's farm and reformatories, statutory o apply to both sexes.
sconsin: Vice-repressive act, venereal disease-control act, act prohibiting sales nereal-disease drugs except on prescription of physician.

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Birmingham, Ala.	[illegible]	[illegible]	12.8	A. 16.9	...
Boston, Mass.	785,245	203	13.5	A. 17.6	
Buffalo, N. Y.	473,229	136	15.0	C. 13.2	...
Cambridge, Mass.	111,432	33	15.4	A. 12.9	...
Chicago, Ill.	2,596,681	597	12.0	A. 14.2	
Cincinnati, Ohio	418,022	99	12.3	C. 17.0	...
Cleveland, Ohio	810,306	141	9.1	C. 10.9	
Columbus, Ohio	225,296	57	13.2	C. 12.5	
Dayton, Ohio	130,655	32	12.8	C. 7.6	
Denver, Colo.	----------	68	----------	----------	...
Fall River, Mass.	128,392	27	11.0	C. 9.7	...
Grand Rapids, Mich.	135,450	25	9.6	C. 11.5	...
Indianapolis, Ind.	290,389	60	10.8	C. 18.0	...
Jersey City, N. J.	318,770	63	10.3	C. 9.7	...
Kansas City, Mo.	313,785	79	13.1	C. 14.6	
Los Angeles, Calif.	568,495	117	10.7	A. 12.0	
Louisville, Ky.	242,707	58	12.5	C. 19.1	
Lowell, Mass.	109,081	26	12.4	A. 18.5	...
Memphis, Tenn.	154,759	67	22.6	C. 18.2	
Milwaukee, Wis.	453,481	79	9.1	A. 12.2	
Minneapolis, Minn.	383,442	92	12.5	C. 9.7	...
Nashville, Tenn.	119,215	43	18.8	C. 19.7	
Newark, N. J.	428,684	87	10.6	C. 13.9	...
New Haven, Conn.	154,865	32	10.8	C. 14.1	...
New Orleans, La.	382,273	125	17.1	A. 20.9	...
New York, N. Y.	5,215,879	1,312	13.1	C. 11.8	
Oakland, Calif.	214,206	24	5.8	A. 9.8	...
Omaha, Nebr.	180,264	38	11.0	C. 10.4	...
Philadelphia, Pa.	1,761,371	480	14.2	[3] 14.4	...
Pittsburgh, Pa.	593,303	150	13.2	C. 14.8	
Portland, Oreg.	----------	56	----------	----------	
Providence, R. I.	263,613	61	12.1	C. 14.4	
Richmond, Va.	160,719	39	12.7	C. 18.5	
Rochester, N. Y.	264,856	76	15.0	C. 14.0	
St. Louis, Mo.	779,951	174	11.6	C. 13.8	
St. Paul, Minn.	257,699	55	11.1	C. 10.1	...
San Francisco, Calif.	478,530	132	14.4	C. 15.0	
Syracuse, N. Y.	161,404	53	17.1	C. 13.9	
Toledo, Ohio	262,234	60	11.9	A. 14.1	
Washington, D. C.	401,681	119	15.4	A. 14.5	
Worcester, Mass.	173,650	30	9.0	C. 12.9	...

[1] "A" indicates that the rate given is the average annual death rate per 1,000 populati
sponding week, of the years 1913 to 1917, inclusive. "C" indicates that the rate is the
per 1,000 population for the corresponding week of 1918.
[2] Population estimated as of July 1, 1919.
[3] Rate is based on statistics of 1915, 1916, and 1917.

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PREVALENCE OF DISEASE.

ealth department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

A-CANTONMENT ZONES—CASES REPORTED WEEK ENDED JUNE 7.

CAMP DIX ZONE, N. J.

ses of communicable diseases reported.

ETTEVILLE SANITARY DISTRICT, N. C.

	Cases.
ea	15
	1
	6
l fever	2

CAMP FUNSTON ZONE, KANS.

an:	
ken pox	4
let fever	1
erculosis	1
oping cough	2

FLAME SCHOOL ZONE, GA. AND ALA.

pinal meningitis:	
mbus	1
d:	
mbus	1
a:	
ogee County	1
a:	
nbus	14
nbus	9
ogee County	10
ia:	
nbus	1
ver:	
nbus	1
:	
nbus	1
gee County	2
abus	6
gee County	2
ix	2
ma	1
ria:	
nbus	1
gee County	2
ever:	
gee County	1

CAMP GORDON ZONE, GA.

Atlanta:	Cases.
Chicken pox	6
Diphtheria	2
Gonorrhea	11
Measles	7
Mumps	1
Pneumonia	1
Scarlet fever	5
Smallpox	17
Syphilis	8
Trachoma	1
Tuberculosis	3
Typhoid fever	8
Whooping cough	1

GULFPORT HEALTH DISTRICT, MISS.

Cancer:	
Gulfport	1
Mississippi City	1
Chicken pox:	
Gulfport	1
Gonorrhea:	
Biloxi	2
Logtown	1
Pascagoula	3
Hookworm:	
Biloxi	1
Pascagoula	1
Malaria:	
Biloxi	2
De Lisle	1
Escatawpa	6
Gulfport	5
Logtown	1
Moss Point	4
Orange Grove	1
Pascagoula	11
Pass Christian	2
Kiln	5
Measles:	
Gautier	1
Pascagoula	5
Picayune	1

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GULFPORT HEALTH DISTRICT, MISS.—continued.

Mumps:	Cases.
Biloxi	3
Gulfport	3
Long Beach	1
Pass Christian	1
Pneumonia:	
Biloxi	1
Long Beach	1
Syphilis:	
Mississippi City	1
Pascagoula	1
Tuberculosis:	
Biloxi	1
Whooping cough:	
Biloxi	1
Gulfport	8
Pascagoula	1

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	6
Mumps	3
Smallpox	4
Typhoid fever	2
Whooping cough	8
Government clinic:	
Gonorrhea	14
Syphilis	7

CAMP LEE ZONE, VA.

Petersburg:	
Gonorrhea	5
Syphilis	4

CAMP MERRITT ZONE, N. J.

Demarest:	
Scarlet fever	3
Englewood:	
Chicken pox	1
Measles	2

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Lauderdale County:	
Chicken pox	3
Mumps	1
Nitrate Plant No. 2:	
Gonorrhea	4
Influenza	1
Malaria	1
Syphilis	3
Tuberculosis	1

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	1
Syphilis	2
Tetanus	1
Tuberculosis	3

CAMP PIKE ZONE, ARK.

Little Rock:	
Chicken pox	4
German measles	1
Gonorrhea	7

CAMP PIKE ZONE, ARK.—continued.

Little Rock—Continued.	Cases.
Mumps	2
Pellagra	1
Ptomaine poisoning	1
Scarlet fever	1
Smallpox	2
Syphilis	2
Tuberculosis	1
North Little Rock:	
Mumps	1
Scott:	
Influenza	2
Tuberculosis	1

CAMP POLK ZONE, N. C.

Chancroid:	
Durham	3
Chicken pox:	
Durham	2
Raleigh	3
Diphtheria:	
Holly Springs	1
Gonorrhea:	
Durham	3
Middle Creek Township	1
Raleigh	2
Measles:	
Raleigh	1
Scarlet fever:	
Raleigh	1
Smallpox:	
Durham	1
Raleigh	1
Tuberculosis:	
Durham	1
Neuse Township	1
White Oak Township	1
Typhoid fever:	
Durham	2
Mangum Township	1
Middle Creek Township	1
Swift Creek Township	1
Whooping cough:	
Durham	8
Durham Township	2
Raleigh	1
White Oak Township	6

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

Chicken pox:	
Norfolk	2
Diphtheria:	
Portsmouth	2
Measles:	
Portsmouth	2
Port Norfolk	2
Norfolk	9
Smallpox:	
Norfolk	3
Tuberculosis:	
Portsmouth	2

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CAMP SHERMAN ZONE, OHIO.

ases:	Cases.
onorrhea	1
yphoid fever	1
nment clinic:	
onorrhea	1

SOUTHER FIELD ZONE, GA.

id fever	1

CAMP TRAVIS ZONE, TEX.

ntonio:	
norrhea	4
laria	1
eumonia	3
philis	6
berculosis	2
ooping cough	4

CAMP UPTON ZONE, N. Y.

Brook Haven:	Cases.
Syphilis	1
Typhoid fever	1
Patchogue:	
Diphtheria	1

WILMINGTON SANITARY DISTRICT, N. C.

Sea Gate:	
Syphilis	1
Wilmington:	
Gonorrhea	13
Malaria	8
Syphilis	2
Tuberculosis	3
Typhoid fever	2
Whooping cough	4

SEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

e following data are taken from telegraphic reports received in ffice of the Surgeon General of the United States Army for the ended May 30, 1919. Reports from the American Expedition- Forces are delayed in transmission, and the "current week" for s in the American Expeditionary Forces is not the same period urrent week" for troops in the United States.

	Current week.	Last week.
dmission rate per 1,000 (all causes)	597.15	552.02
roops in United States	1,152.50	1,114.30
rican Expeditionary Forces	377.00	330.85
dmission rate per 1,000 (disease only)	524.45	493.76
roops in United States	1,011.25	1,013.58
rican Expeditionary Forces	394.64	269.23
tive per 1,000 on day of report	35.84	36.42
roops in United States [1]	54.43	55.82
rican Expeditionary Forces	26.88	28.79
eath rate per 1,000 (all causes)	6.94	5.89
oops in United States [1]	10.16	8.20
ican Expeditionary Forces	5.51	4.86
eath rate per 1,000 (disease only)	4.31	4.06
oops in United States [1]	8.41	7.30
ican Expeditionary Forces	2.56	2.78

nd death rates among troops in the United States will continue to be relatively high, as the nu- rength of troops in the United States continues to decline from week to week as a result of de- ion. Well men only are eligible for discharge, while the sick and otherwise disabled are retained for further treatment. The continued influx of sick and wounded (properly chargeable to com- erseas) is another factor tending to increase rates in the United States and to diminish correspond- lar rates overseas.

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Meade	1		1	31	3				2	
Pike	2			43	3					
Shelby				6	2					
Sherman				5		1			1	
Taylor	1			5	2					
Travis			2	6	5					
Upton	7		1	27	1					
Northeastern Department				3						
Eastern Department				9	5					
Southeastern Department				3						
Central Department				4						
Southern Department				47	2	8				
Western Department				24	15		1	1		
Aviation camps				21	5				1	
Port of embarkation:										
Hoboken	3			6	4	20	5			
Newport News	41		2	153	8	29				
Fort Monroe				3						
Alcatraz Disciplinary Barracks										
Leavenworth Disciplinary Barracks										
Columbus Barracks				3	1		1			
Jefferson Barracks				5	5					
Fort Logan				2	2					
Fort McDowell	1			2						
Fort Sill	1			9	6					
Fort Slocum				1	1					
Fort Thomas				6	6					
West Point				1						
Arsenals						3				
Miscellaneous small stations				8						
Total	64	1	9	616	109	62	9	1	4	1

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Number of deaths at large camps in United States week ended May 30, 1919.

Camp.	Strength.	Deaths.		Camp.	Strength.	Deaths.	
		All causes.	Disease only.			All causes.	Disease only.
ng	1,650	0	.....	Shelby	2,653	1	.....
	2,006	0	.....	Sherman	9,590	3	2
	805	0	.....	Taylor	6,940	1	1
	4,810	1	0	Travis	2,582	1	.....
s	6,617	0	.....	Upton	23,431	0	.....
	19,356	1	1	Northeastern Department	2,868	0	.....
	5,172	0	.....	Eastern Department	13,554	0	.....
on	2,642	3	3	Southeastern Department	3,450	0	.....
n	4,154	1	1	Central Department	4,339	0	.....
	8,412	1	1	Southern	29,324	3	2
hreys	2,060	1	1	Western Department	8,676	0	.....
n	4,662	1	1	Aviation camps	16,643	2	0
	2,177	1	1	Ports of embarkation:			
Knox	2,082	0	.....	Hoboken	37,009	2	2
	6,386	2	.....	Newport News	22,832	4	4
	4,107	1	1	All others	84,178	37	33
	9,483	2	2	Total	353,209	70	57
	3,560	1	1				

Annual admission rate per 1,000 for certain diseases.

Diseases.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
nia	9.29	5.00	7.05	5.46
ry	.14	.13	.00	.10
	1.30	1.66	.44	.43
l	89.42	110.36	74.45	47.14
hoid	.00	.00	.00	.10
l	.14	.13	.25	.21
	1.30	1.66	2.18	1.85
is	.14	.00	.64	.82
ever	.58	4.17	.25	.38
a	9.0	10.84	.....	.....

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended June 7, 1919.

bama.—State totals: Typhoid fever 5, malaria 14, smallpox 36, s 16, scarlet fever 5, diphtheria 3, whooping cough 16, pul- y tuberculosis 31, meningitis 1, infantile paralysis 12, influenza ereal diseases 108.

fornia.—Smallpox: San Jose 30, Colusa 5, Oakland 2, San sco 2, Los Angeles 2, Los Angeles County 1, Fresno County 1, l County 1. Typhoid fever: San Francisco 1, Sacramento 1, ngeles 4, Brawley 4. Merced County reports 1 case cerebro- meningitis. Influenza: Cases reported, 143.

necticut.—State reports: Cerebrospinal meningitis, Waterbury nus, Stamford 1.

ware.—Diphtheria: Wilmington 2, Laurel 1. Measles: Dover le Creek 1, Wilmington 1. Pneumonia: Dover 1. Scarlet

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9, Anna 9, Eldorado 6, Rankin 6, Galesburg 4, Momence 4
boro 4, East Peoria 3, Norris City 3, Chicago 3. Meningit
4, Elgin 2, Aurora 1. Poliomyelitis: Chicago 1, Belleville 2
gic encephalitis: Chicago 2. Influenza: Cases reported,
in Chicago 6. Gonorrhea 143, syphilis 88.

Indiana.—Scarlet fever reports by counties: Porte
Elkhart, Wabash, Marshall, Montgomery, Pike, Hend
also in the city of South Bend. Smallpox reported by
Ripley, Vermilion, Jennings, Kosciusko, Delaware, Parke,
and Jay. Diphtheria reported by counties: Kosciusko 2
3, Hendricks 5, Grant 3, Johnson 3, Porter 1, Dekalb 2, an
Typhoid fever reported by counties: Jennings, Elkhart,
Delaware, and Vanderburg. Measles reported by counti
Marshall, Dekalb, Elkhart, Kosciusko, Lake, and Clay. S
gonorrhea 8.

Iowa.—Chancroid: Castana 2. Chicken pox: Council
Diphtheria: Council Bluffs 2, Davenport 9, Dubuque 1, O
Red Oak 1, Sioux Center 1, South Des Moines 1. Gonorrl
Rapids 1, Conesville 1, Davenport 5, Dubuque 9, Galva
City 1, Le Mars 2, Mason City 2, Sergeant Bluff 1, Shena
Sioux City 23, Spencer 3. Measles: Council Bluffs 5. Sca
Burlington 2, Cedar Falls 1, Des Moines 1, Goodell 1, In
Lester 1, Mitchellville 1, Perry 7, Postville 2. Smallpox:
Cedar Rapids 14, Council Bluffs 9, Davenport 3, Des Moine
River 1, Mason City 2, Quasqueton 1. Syphilis: Cherokee
port 6, Des Moines 1, Dubuque 4, Sioux City 1. Whoopi
Council Bluffs 2. In rural districts of following counties—Di
Mills 1, Polk 1, Tama 1. Gonorrhea: Polk 1. Scarlet fev
okee 1, Decatur 1, Des Moines 2, Fayette 3, Ida 1, Monona 3

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Page 1. Smallpox: Buchanan 1, Clayton 1, Marshall 1, Pottatamie 3, Webster 3.

Kansas.—Kansas City reports one case of meningitis. State als: Smallpox 63, diphtheria 14, scarlet fever 48, influenza 6.

Louisiana.—Poliomyelitis 1, typhoid fever 24, smallpox 31, pella 11, diphtheria 9, gonorrhea 103, syphilis 85, chancroid 9.

Maine.—Chicken pox: Greenville 16, Portland 4. Diphtheria: stol 1, Waterville 1, Washburn 1, Fairfield 1, Portland 1, Westok 5. Gonorrhea: Bath 3, Lewiston 4, Portland 4, Belfast 1, ford 1, South Portland 1. Measles: Portland 1, South Berwick 1. nps: Corinna 1, Sanford 4. Scarlet fever: Farmington 3, Bris- 3, Bath 1, Portland 6, Brunswick 3, Rockland 1, Westbrook 3. allpox: Rangeley 2, Lisbon 8. Syphilis: Augusta 2, Brunswick 1, lison 1, Skowhegan 1, Lewiston 2, Portland 6. Tuberculosis: land 2, Bangor 1, Boothbay Harbor 1, Cherryfield 1, Danforth 1, liner 1, Fairfield 1, South Berwick 1, South Portland 1, Haynes- 1, Houlton 1, Pittsfield 1, Turner 1. Typhoid fever: Portland 3, nam 1. Whooping cough: South Berwick 5.

Massachusetts.—Unusual prevalence of measles reported, Fall r reporting 43, Lynn 42, and Worcester 31.

Minnesota.—Small pox (new foci): Bigstone County (Ortonville ge) 3, Stearns County (Sauk Center) 2, Wabasha County (West ny Township) 1. Syphilis 80, gonorrhea 129, chancroid 3, brospinal meningitis 2.

New Jersey.—Cases reported: Influenza, 4, pneumonia 46. Trenton and Dover town report unusual prevalence of measles. Smallreported from: Beverly Township (Burlington County) and from ower and upper townships in Cape May County. Elizabeth reports unusual prevalence of scarlet fever.

New York.—State totals, exclusive of New York City: Typhoid 20, measles 438, scarlet fever 161, whooping cough 107, diph- a 200. Smallpox cases reported 3: North Collins town 1, Utica 1, and Candor 1. Cerebrospinal meningitis: Amsterdam 1. myelitis: Oswego 1, Mount Vernon 1, Ontario 1. Pneumonia: reported 54. Syphilis 76, gonorrhea 34, reported voluntarily.

North Carolina.—State totals: Whooping cough 144, measles 132, heria 7, scarlet fever 8, smallpox 77, chickenpox 48, typhoid 87, broncho pneumonia 4, lobar pneumonia 5, cholera infantum ysentery (bacillary) 12, dysentery (amebic) 1, trachoma 3, rhea 135, syphilis 73, chancroid 17, gonorrhea and syphilis 1, rhea and chancroid 4.

Ohio.—Scarlet fever: Ashtabula 7, Cincinnati 32, Washington 10. pox: Hamilton 12, Steubenville 6, Youngstown 24. Typhoid Ironton 3, Wellsville 5.

Oregon.—Portland reports 4 cases and 2 deaths from influenza, County 1, and Hood River 26.

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Pickens County	5
Tuscaloosa County	17
Total	57
Kansas:	
Cherokee County—	
Galena	1
Virginia:	
Accomac County—	
Chincoteague	14
Onancock	2
Augusta County	9
Brunswick County	7
Caroline County	3
Charles City County	2
Cumberland County	1
Dinwiddie County	2
Essex County	1
Gloucester County	15
Grayson County	6
Greensville County—	
Emporia	16
Halifax County	3
Houston	1
Hanover County	2
Henry County	1
Isle of Wight County	18
James City County	6
Montgomery County	
Nansemond County	
New Kent County	
Northampton County	
Cape Charles	
Pittsylvania County	
Powhatan County	
Princess Anne County	
Prince Edward County	
Prince George County	
Hopewell	
Prince William County	
Rockingham County—	
Dayton	
Southampton County	
Capon	
Franklin	
Spottsylvania County	
Fredericksburg	
Surry County	
Sussex County	
Stony Creek	
Tazewell County—	
Tazewell	
Warwick County	
Washington County	
Westmoreland County	
York County	
Total	

City Reports for Week Ended May 24, 1919.

Place.	Cases.	Deaths.	Place.
Atlanta, Ga	1		Pine Bluff, Ark
High Point, N. C	2		Portsmouth, N. H
Newark, N. J	1		Tuscaloosa, Ala
New Orleans, La		1	

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Jun

	Cases.		
Fayetteville sanitary district, N. C	1	Camp Merritt zone, N. J	
Gas and Flame School zone, Ga. and Ala	19	Camp Polk zone, N. C	
Camp Gordon zone, Ga	7	Portsmouth and Norfolk County Va	
Gulfport health district, Miss	7		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1

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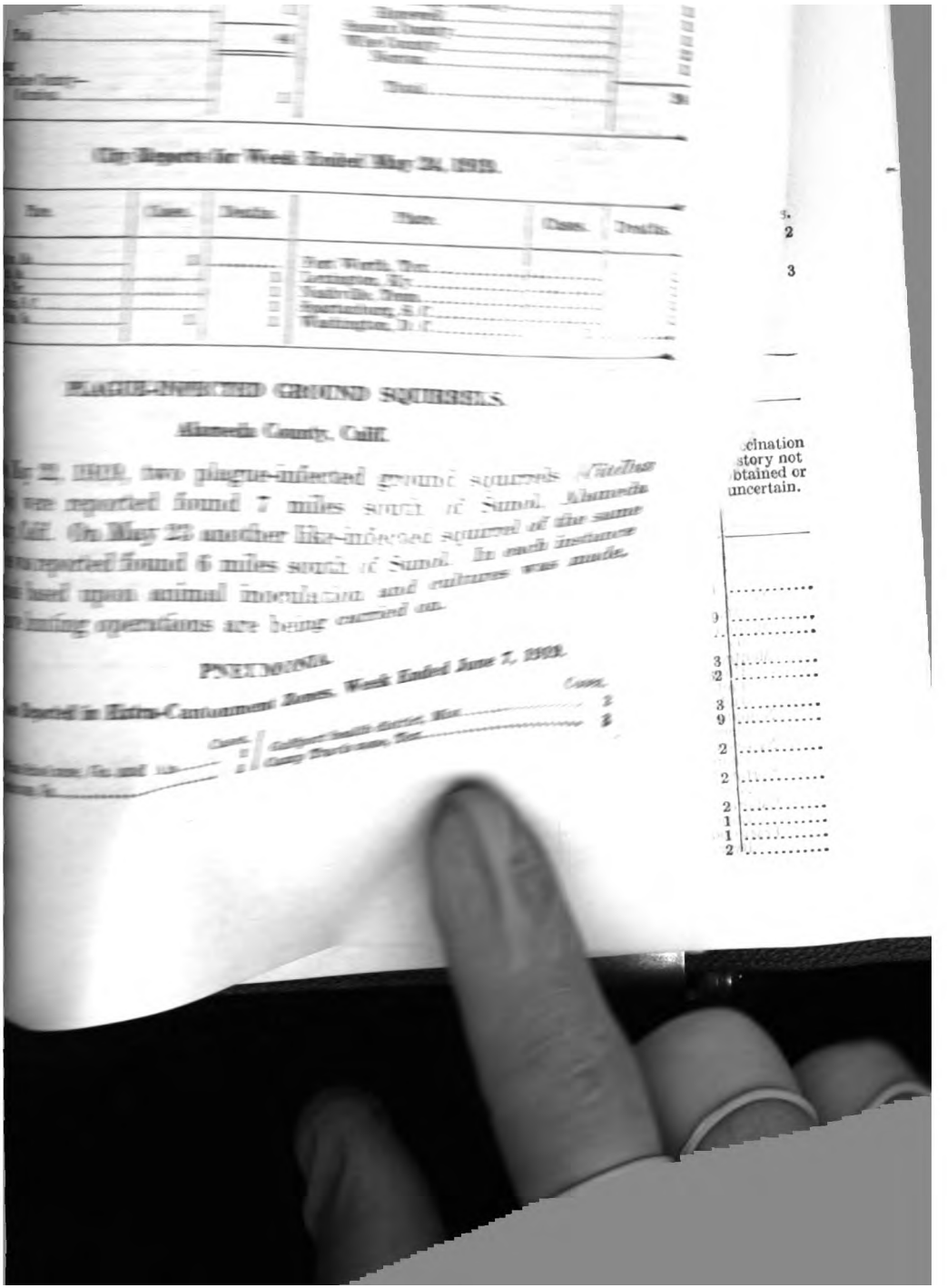

City Reports for Week Ended May 24, 1919.

Date.	Cases.	Deaths.	Date.	Cases.	Deaths.
[illegible]	[illegible]	[illegible]	Fort Worth, Tex.	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Lexington, Ky.	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Nashville, Tenn.	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Spartanburg, S. C.	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	Washington, D. C.	[illegible]	[illegible]

PLAGUE-INFECTED GROUND SQUIRRELS.

Alameda County, Calif.

May 22, 1919, two plague-infected ground squirrels (*Citellus* [illegible]) were reported found 7 miles south of Sunol, Alameda County, Calif. On May 23 another like-infected squirrel of the same species was reported found 6 miles south of Sunol. In each instance diagnosis based upon animal inoculation and cultures was made. No further operations are being carried on.

PNEUMONIA.

Cases Reported in Extra-Cantonment Areas, Week Ended June 7, 1919.

[illegible]	Cases.	[illegible]	Cases.
[illegible]	[illegible]	[illegible]	2
[illegible]	[illegible]	[illegible]	2

[illegible]	3
[illegible]	2
[illegible]	3
[illegible]	9
[illegible]	2
[illegible]	2
[illegible]	2
[illegible]	1
[illegible]	1
[illegible]	2

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Cleveland, Ohio	17	18	.....	.....	Pomona, Calif.	.....	
Columbus, Ga.	3	3	.....	.....	Rochester, N. Y.	.....	
Dayton, Ohio	1	1	.....	.....	Sacramento, Calif.	.....	
Detroit, Mich.	7	15	9	19	Salem, Oreg.	.....	
Duluth, Minn.	4	6	.....	.....	San Antonio, Tex.	.....	
East Orange, N. J.	1	1	.....	.....	Sandusky, Ohio	.....	
Elizabeth, N. J.	5	.....	.....	.....	San Jose, Calif.	.....	
Fall River, Mass.	3	.....	.....	.....	Sault Ste. Marie, Mich.	.....	
Flint, Mich.	1	1	.....	.....	Schenectady, N. Y.	.....	
Fort Worth, Tex.	2	2	.....	.....	Somerville, Mass.	.....	
Grand Rapids, Mich.	1	1	.....	.....	Springfield, Mass.	.....	
Haverhill, Mass.	3	1	.....	.....	Tacoma, Wash.	.....	
Highland Park, Mich.	1	.....	.....	.....	Trenton, N. J.	.....	
Independence, Mo.	.....	.....	1	1	Tulsa, Okla.	.....	
Kansas City, Mo.	.....	.....	6	8	Westfield, Mass.	.....	
Lackawanna, N. Y.	2	1	.....	.....	Worcester, Mass.	.....	
Lorain, Ohio	1	.....	.....	.....			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for April, 1919.

Place.	New cases reported.	Place.	
Pennsylvania:		Virginia—Continued.	
Warren County	1	Mecklenburg County	.....
		Page County	.....
Virginia:		Pittsylvania County	.....
Accomac County	1	Scott County	.....
Alleghany County—			
Covington	1	Total	.....
Amelia County	1		

City Reports for Week Ended May 24, 1919.

During the week ended May 24, 1919, one case of p was reported at Chicago, Ill., and one at Kenosha, Wis. was reported at Burlington, Iowa.

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SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended June 7, 1919.

	Cases.		Cases.
Camp Funston zone, Kans.	1	Camp Merritt zone, N. J.	3
Gas and flame school zone, Ga. and Ala.	1	Camp Pike zone, Ark.	1
Camp Gordon zone, Ga.	5	Camp Polk zone, N. C.	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1335.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended June 7, 1919.

	Cases.		Cases.
Gas and flame school zone, Ga. and Ala.	3	Camp Polk zone, N. C.	2
Camp Gordon zone, Ga.	17	Portsmouth and Norfolk County health district, Va.	3
Camp Jackson zone, S. C.	4		
Camp Pike zone, Ark.	2		

Kansas Report for April, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Kansas:						
Allen County—						
Iola	1				1	
Anderson County—						
Kincaid	9				9	
Garnett	1			1		
Atchison County—						
Oak Mills	3				3	
Atchison (2 R. D.)	63			1	62	
Barton County—						
Great Bend (3 R. D.)	3				3	
Hoisington	9				9	
Bourbon County—						
Fort Scott	2				2	
Brown County—						
Padonia	2				2	
Butler County—						
Augusta (1 R. D.)	2				2	
Derby (1 R. D.)	1				1	
Oil Hill	1				1	
Eldorado	2				2	

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Doniphan County—				
Elwood	7			1
Wathena	1			
Douglas County—				
Baldwin (2 R. D.)	2		1	
Edwards County—				
Lewis	1			
Ford County—				
Bloom (2 R. D.)	2			
Dodge City (1 R. D.)	2			
Franklin County—				
Pomona	1			
Geary County—				
Junction City	1			
Gove County—				
Oakley (R. D.)	1			
Graham County—				
Hill City	1			
Greenwood County—				
Piedmont (2 R. D.)	2			
Harvey County—				
Newton	4			
Jackson County—				
Mayetta	1			
Jefferson County—				
Nortonville	2			
Johnson County—				
Gardner	3			
Kingman County—				
Chaney (1 R. D.)	1			
Labette County—				
Parsons	5			
Lane County—				
Dighton	7		1	
Leavenworth County—				
Jarbalo	5			
Leavenworth	8			1
Linn County—				
La Cygne	8			1
Marshall County—				
Marysville	3			
Miami County—				
Louisburg	1			
Montgomery County—				
Cherryvale	2			
Coffeyville	1			
Independence	1			
Nemaha County—				
Bern	1			
Neosho County—				
Chanute (3 R. D.)	71		1	4
Norton County—				
Norton	11			
Osborne County—				
Luray	1			
Pratt County—				
Byers	3			

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SMALLPOX—Continued.

Kansas Report for April, 1919—Vaccination Histories—Continued.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
ıs—Continued.						
eno County—						
Hutchinson	1				1	
iley County—						
Manhattan (R. D.)	3				3	
ott County—						
Scott City	1				1	
dgwick County—						
Wichita (2 R. D.)	24			1	23	
ward County—						
Carson	1				1	
awnee County—						
Topeka	12				12	
erman County—						
Goodland	3			1	2	
evens County—						
Hugoton	1				1	
mner County—						
South Haven (6 R. D.)	8				8	
Wellington	2				2	
abaunsee County—						
Alta Vista	2				2	
ison County—						
Buffalo	1				1	
yandotte County—						
Kansas City	8				8	
otal	337		3	11	323	

State Reports for April, 1919.

Place.	Cases.	Deaths.
a:		
dwin County	2	
oun County	4	
ctaw County	1	
ee County	1	
man County	3	
wah County	1	
son County	1	
rson County	22	
rence County	3	
estone County	1	
ile County	51	
tgomery County	2	
caloosa County	4	
ker County	1	
ox County	1	1
tal	98	1
vania:		
gheny County	5	
rer County	10	
bria County	1	
rfield County	1	
on County	1	
wanna County	4	
ean County	2	
adelphia County	4	
hington County	1	
ne County	3	
tal	32	

Place.	Cases.	Deaths.
Virginia:		
Accomac County	34	
Parksley	2	
Onancock	1	
Alleghany County	2	
Covington	11	
Campbell County—		
Altavista	1	
Lynchburg	6	
Caroline County	2	
Carroll County	2	
Peck	1	
Dickenson County	25	
Elizabeth City County	8	
Fairfax County	2	
Fauquier County	2	
Delaplane	1	
Frederick County	4	
Giles County	2	
Halifax County	2	
Meadville	6	
Henrico County—		
Richmond	1	
Henry County	3	
King and Queen County	1	
King William County	3	
Lee County	3	
Lunenburg County	10	
Middlesex County	2	
Montgomery County	8	
Norfolk County	7	
Norfolk	15	
Portsmouth	5	

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SMALLPOX—Continued.

State Reports for April, 1919—Continued.

Place.	Cases.	Deaths.
Virginia—Continued.		
Nottoway County	3	
Page County	2	
Patrick County	8	
Pittsylvania County	5	
Chatham	1	
Danville	3	
Prince Edward County—		
Farmville	1	
Prince George County	2	
Prince William County	2	
Roanoke County—		
Roanoke	21	
Rockbridge County	3	
Russell County—		
Wilder	4	
Dante	16	
Virginia—Continued.		
Surry County	4	
Tazewell County	4	
Boissevain	3	
Flat Top	1	
Pocahontas	6	
Warren County	1	
Warwick County—		
Newport News	3	
Wise County	4	
Wythe County—		
Ivanhoe	1	
Total	270	

City Reports for Week Ended May 24, 1919.

Place.	Cases.	Deaths.
Aberdeen, S. Dak	9	
Alameda, Calif	1	
Ann Arbor, Mich	1	
Atchison, Kans	4	
Atlanta, Ga	22	
Austin, Tex	1	1
Baltimore, Md	1	
Baton Rouge, La	2	
Battle Creek, Mich	2	
Beatrice, Nebr	1	
Beaumont, Tex	1	
Bedford, Ind	4	
Birmingham, Ala	1	
Boise, Idaho	1	
Canton, Ohio	1	
Cedar, Rapids, Iowa	16	
Chanute, Kans	8	
Chicago, Ill	1	
Cincinnati, Ohio	7	
Cleveland, Ohio	14	
Columbia, S. C	1	
Columbus, Ga	5	
Columbus, Ohio	1	
Council Bluffs, Iowa	3	
Covington, Ky	2	
Dallas, Tex	24	
Danville, Ill	1	
Davenport, Iowa	14	
Denver, Colo	12	
Des Moines, Iowa	1	
Detroit, Mich	2	
Dubuque, Iowa	3	
Duluth, Minn	7	
Evansville, Ind	1	
Everett, Wash	2	
Flint, Mich	2	
Fond du Lac, Wis	1	
Fort Wayne, Ind	3	
Fort Worth, Tex	1	
Galesburg, Ill	11	
Grand Rapids, Mich	1	
Great Falls, Mont	7	
Green Bay, Wis	2	
Hoquiam, Wash	4	
Hutchinson, Kans	1	
Indianapolis, Ind	6	
Joplin, Mo	2	
Kalamazoo, Mich	3	
Kansas City, Kans	2	
Kansas City, Mo	8	
Knoxville, Tenn	4	
Kokomo, Ind	8	
La Crosse, Wis	1	
Leavenworth, Kans	1	
Lincoln, Nebr	11	
Logansport, Ind	10	
Long Beach, Calif	3	
Los Angeles, Calif	1	
Louisville, Ky	1	
Madison, Wis	1	
Marshalltown, Iowa	6	
Memphis, Tenn	2	
Middletown, Ohio	1	
Milwaukee, Wis	10	
Minneapolis, Minn	23	
Mobile, Ala	4	
Montgomery, Ala	1	
Nashville, Tenn	2	
New Orleans, La	3	
Norfolk, Va	1	
Oakland, Calif	1	
Ogden, Utah	2	
Oklahoma City, Okla	17	
Omaha, Nebr	23	
Parsons, Kans	2	
Pekin, Ill	11	
Peoria, Ill	10	
Portland, Oreg	25	
Portsmouth, Ohio	3	
Racine, Wis	5	
Richmond, Va	1	
Roanoke, Va	4	
Rockford, Ill	2	
Rock Island, Ill	13	
St. Cloud, Minn	2	
St. Joseph, Mo	25	
St. Louis, Mo	4	
Salt Lake City, Utah	1	
San Jose, Calif	1	
Sioux City, Iowa	2	
Spokane, Wash	1	
Steubenville, Ohio	1	
Stillwater, Minn	1	
Superior, Wis	2	
Tacoma, Wash	7	
Toledo, Ohio	4	
Topeka, Kans	1	
Tulsa, Okla	3	
Walla Walla, Wash	1	
Washington, D. C	8	
Wheeling, W. Va	1	
Wichita, Kans	8	
Winston-Salem, N. C	13	
Yakima, Wash	6	
Youngstown, Ohio	11	

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SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended June 7, 1919.

	Cases.		Cases.
...ville sanitary district, N. C.	6	Muscle Shoals sanitary district, Ala.	3
...and flame school zone, Ga. and Ala.	11	Picric acid plant zone, Ga.	2
...p Gordon zone, Ga.	8	Camp Pike zone, Ark.	2
...port health district, Miss.	2	Camp Travis zone, Tex.	6
...p Jackson zone, S. C.	7	Camp Upton zone, N. Y.	1
...p Lee zone, Va.	4	Wilmington sanitary district, N. C.	3

TETANUS.

City Reports for Week Ended May 24, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
...swick, Ga.	1	1	Providence, R. I.		1
...lbus, Ohio		1	Trenton, N. J.		1
...ngeles, Calif.		1	Wilmington, N. C.		1

TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended June 7, 1919.

	Cases.		Cases.
Funston zone, Kans.	1	Camp Pike zone, Ark.	4
...d flame school zone, Ga. and Ala.	3	Camp Polk zone, N. C.	3
Gordon zone, Ga.	3	Portsmouth and Norfolk County health district, Va.	1
...rt health district, Miss.	1	Camp Travis zone, Tex.	2
...Shoals sanitary district, Ala.	1	Wilmington sanitary district, N. C.	3
...cid plant zone, Ga.	3		

also Diphtheria, measles, scarlet fever, and tuberculosis, page 1335.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended June 7, 1919.

	Cases.		Cases.
...ville sanitary district, N. C.	2	Camp Sherman zone, Ohio	1
...l flame school zone, Ga. and Ala.	1	Souther Field zone, Ga.	1
...Gordon zone, Ga.	8	Camp Upton zone, N. Y.	1
...ackson zone, S. C.	2	Wilmington sanitary district, N. C.	2
...olk zone, N. C.	5		

State Reports for April, 1919.

Place.	New cases reported.	Place.	New cases reported.
...:		Alabama—Continued.	
...auga County	1	Montgomery County	1
...oun County	1	Pickens County	1
...taw County	1	Talladega County	2
...e County	1	Tallapoosa County	1
...ert County	1	Tuscaloosa County	3
...ington County	2	Walker County	2
...rah County	5	Winston County	3
...va County	1		
...ne County	2	Total	53
...County	1		
...y County	8		
...ton County	1	Kansas:	
...on County	1	Anderson County—	
...son County	8	Colony	1
...n County	1	Butler County—	
...le County	5	Eldorado	2

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Milton	1
Total	22
Pennsylvania:	
Adams County	1
Allegheny County	8
Armstrong County	4
Beaver County	3
Bedford County	1
Berks County	5
Bradford County	4
Bucks County	6
Butler County	1
Center County	3
Chester County	3
Crawford County	2
Cumberland County	17
Dauphin County	1
Delaware County	4
Erie County	2
Fayette County	2
Huntingdon County	2
Jefferson County	3
Juniata County	1
Lancaster County	2
Lawrence County	2
Lehigh County	3
Luzerne County	2
Mercer County	1
Mifflin County	1
Montgomery County	2
Montour County	1
Philadelphia County	35
Schuykill County	1
Somerset County	3
Chesterfield County—	
Beach	1
Dickenson County	1
Floyd County	1
Goochland County	1
Greensville County—	
Emporia	1
Halifax County	2
Henrico County—	
Richmond	1
King George County	2
Lee County	2
Keokee	1
Lunenburg County	1
Madison County	3
Mecklenburg County	3
Nelson County	1
Page County—	
Shenandoah	2
Rockbridge County	3
Rockingham County—	
Elkton	2
Shenandoah County	2
Southampton County	1
Newsoms	1
Surry County	1
Tazewell County—	
Graham	1
Warwick County—	
Newport News	2
Wise County	1
St. Paul	1
York County	2
Total	63

City Reports for Week Ended May 24, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Akron, Ohio	1	.....	Cairo, Ill	.....	1
Allentown, Pa	1	.....	Charleston, W. Va	.....	1
Baltimore, Md	5	1	Cheyenne, Wyo	1	1
Baton Rouge, La	2	.....	Chicago, Ill	4	.....
Bellaire, Ohio	1	.....	Cleveland, Ohio	1	.....
Birmingham, Ala	1	.....	Columbia, S. C	4	.....
Boston, Mass	2	.....	Columbus, Ohio	1	.....
Brunswick, Ga	1	1	Dallas, Tex	1	.....
Buffalo, N. Y	2	1	Denver, Colo	1	.....

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TYPHOID FEVER—Continued.

City Reports for Week Ended May 24, 1919—Continued.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Orange, N. J.	1		Portland, Me.	3	
beth, N. J.	1		Portland, Oreg.	1	
sville, Ind.	1		Pueblo, Colo.	2	
Worth, Tex.	2		Quincy, Mass.	1	
ont, Ohio	1		Reading, Pa.	1	
stead, Pa.	1		Richmond, Va.	1	
endence, Mo.	1		Riverside, Calif.	2	
town, Pa.	1		Saginaw, Mich.	1	
s City, Mo.	1		St. Louis, Mo.	3	2
wanna, N. Y.	1		Salt Lake City, Utah	1	
nce, Kans.	1	1	San Antonio, Tex.	2	
Rock, Ark.	1		Sandusky, Ohio	1	
ort, N. Y.		1	Santa Barbara, Calif.	1	1
ngeles, Calif.	5		Sharon, Pa.	1	
ille, Ky.	3	1	Tacoma, Wash.	1	
Mass.	1		Trenton, N. J.	1	
ukee, Wis.	1		Tulsa, Okla.	1	
, Ala.	2		Washington, D. C.	6	1
, Ill.	2		Washington, Pa.	1	
lle, Tenn.	1		Waterbury, Conn.	1	
aven, Conn.	2		Wheeling, W. Va.	1	
ondon, Conn.	1	1	Wilmington, N. C.	1	1
rleans, La.	3	2	Winston-Salem, N. C.	1	
ork, N. Y.	3	1	Worcester, Mass.	1	
lphia, Pa.	7	3	Youngstown, Ohio	2	2

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for April, 1919.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
a.	27	171	22	Pennsylvania	1,052	7,282	1,020
	99	194	230	Virginia	74	986	113

City Reports for Week Ended May 24, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census. Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
, S. Dak.	15,926						1			
fass.	14,406	1								
hio	93,604	34	3		73		10		4	
Calif.	26,433	6	1		6					
n, Pa.	65,109		3		69		2			
	23,783	5			1					
, Ind.	24,230	6								
r, Mich.	15,041	11			2					
, Ala.	14,326								1	
Conn.	16,954	4							1	
Wis.	18,005	7							2	2
, Mass.	12,073	1					1			
ark, N. J.	14,629				2					
, Ohio	22,008	9	1	1			9			
Kans.	16,785		1				8			
ia	196,144	56	1		13		5		2	6
ity, N. J.	59,515	14			2				5	1
Mass.	19,776	7	1				1		1	
ex	35,612	7								

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	10,437	3								
	23,851	10								
	13,749		1							
	10,613	1								
	14,575	7								
	21,154		1				2			
	18,547	2					1		1	
Mich	11,099	1								
	60,427	5			2					1
	22,128	2	1				1		1	
	17,760	2								
	15,123						3			
Birmingham, Ala	189,716	49			9		1		5	5
Bloomington, Ind	11,661	3					2		1	
Boise, Idaho	35,951	2					5			
Boston, Mass	767,813	220	49	1	22		65		42	27
Braddock, Pa	22,060		1		1					
Brazil, Ind	10,472	2			5					
Bridgeport, Conn	124,724	27	9		4	1	2		7	2
Bristol, Conn	16,318	1	1		5		1			
Brockton, Mass	69,152	15								1
Brookline, Mass	33,526	8								1
Brunswick, Ga	10,984	4								
Buffalo, N. Y	475,781	129	45	8	64	1	15		43	13
Burlington, Iowa	25,144	7	1				5			
Butler, Pa	28,677		1				1		1	
Butte, Mont	44,057						4			
Cadillac, Mich	10,158	2	2							
Cairo, Ill	15,995	5	1		2					1
Cambridge, Mass	114,293	26	2		2		6		7	4
Camden, N. J	103,117		4		4		5		3	
Canton, Ill	13,674	8								
Canton, Ohio	62,566	13			10				1	
Carlisle, Pa	10,795				74					
Cedar Rapids, Iowa	38,033		1							
Centralia, Ill	11,838	5								
Champaign, Ill	15,052	3								1
Chanute, Kans	12,968	3			1					
Charleston, S. C	61,041	25								1
Charleston, W. Va	31,060	6	1		2		2			
Charlotte, N. C	40,759	14			10					
Chelsea, Mass	48,405	11			1		1		2	
Chester, Pa	41,857		2		4		1		6	
Cheyenne, Wyo	[1] 11,320				4					
Chicago, Ill	2,547,201	660	134	11	1,028	13	59	3	359	81
Chicopee, Mass	29,950	7	2						2	3
Chillicothe, Ohio	15,625	3	1	1			2			1
Cincinnati, Ohio	414,248	104	9	2	38		32		17	29
Cleveland, Ohio	692,259	171	9	2	75	4	8		38	25
Clinton, Mass	[1] 13,075	2					3		1	1
Coatesville, Pa	14,998				2					
Cohoes, N. Y	25,292	7	1		1		2		1	1
Colorado Springs, Colo	38,965	17							21	5
Columbia, S. C	35,165		1						2	
Columbus, Ga	26,306	21			2		1		2	2
Columbus, Ohio	220,135	62			10		11		5	6
Concord, N. H	22,858	6					2			
Council Bluffs, Iowa	31,838	11	1				1			
Covington, Ky	59,623	16					3		3	1
Cranston, R. I	26,773	5								
Cumberland, Md	26,686	5			3		2	1	1	
Dallas, Tex	129,738	36	1						5	5
Danbury, Conn	22,931	8	1				2			
Danvers, Mass	10,037	1								1
Danville, Ill	32,969				7					
Davenport, Iowa	49,618		1							

[1] Population Apr. 15, 1910.

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East St. Louis, Ill.	77,512	13								
Eau Claire, Wis.	18,887				14					
Elgin, Ill.	28,562	5	1		2		1			
Elizabeth, N. J.	88,830		3		1		12		7	2
Elmira, N. Y.	38,272	8			8		1		1	
El Paso, Tex.	69,149	45	1				4			10
Englewood, N. J.	12,603	1			3		1			
Erie, Pa.	76,592		2		3				8	
Eureka, Calif.	15,142	3								
Evanston, Ill.	29,304	7			65		1			
Evansville, Ind.	76,981	7	2				3		2	1
Everett, Mass.	40,160	3	2				2			
Everett, Wash.	37,205						1			
Fairmount, W. Va.	16,111		2		10		3			
Fall River, Mass.	129,828	33	2		52	3	1		5	5
Fargo, N. Dak.	17,872	3			19					
Farrell, Pa.	[1] 10,190		1							
Findlay, Ohio.	14,858	7			19					2
Flint, Mich.	57,386	13	2				2			
Fond du Lac, Wis.	21,486	3					3			
Fort Scott, Kans.	10,564	4	1		1					1
Fort Wayne, Ind.	78,014	17	2							1
Fort Worth, Tex.	109,597	21	2		3		4		1	1
Fostoria, Ohio.	10,959	1			1					
Framingham, Mass.	14,149	5			15				1	
Frederick, Md.	11,225	4					2			
Freeport, Ill.	19,844	3						1		
Fremont, Ohio.	11,034	4	1						1	1
Fresno, Calif.	36,314	9								
Galesburg, Ill.	24,629	7	1		21		1			2
Galveston, Tex.	42,650	14							1	2
Gloversville, N. Y.	22,314				1		34		1	1
Grand Rapids, Mich.	132,861	36	1		17		6		2	2
Great Falls, Mont.	[1] 13,948	10					3		1	
Greely, Colo.	11,942	4								1
Green Bay, Wis.	30,017	10			1					
Greenfield, Mass.	12,251	2	1							
Greensboro, N. C.	20,171	6								
Greensburgh, Pa.	15,881				5					
Greenville, S. C.	18,574	2			2				1	
Greenwich, Conn.	19,594						3			2
Hackensack, N. J.	17,412	9			1		1		2	
Hammond, Ind.	27,016	13			8					
Harrisburg, Pa.	73,276				176		6			
Harrison, N. J.	17,345		2						3	
Hartford, Conn.	112,831	29	9	1	8		4		2	2
Haverhill, Mass.	49,180	12	2				3		3	
Hazelton, Pa.	28,981				5		2			
Highland Park, Mich.	33,859	4	17		8		1			
High Point, N. C.	13,439	1			2		1			
Hoboken, N. J.	78,324	14		1						4
Holland, Mich.	12,459	2								
Holyoke, Mass.	66,503	11	2				2		1	1
Hudson, N. Y.	12,898	4								2
Hutchinson, Kans.	21,461				1					
Independence, Mo.	11,964	3			2					

[1] Population Apr. 15, 1910.

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Kokomo, Ind	21,929	4	1			1			
Lackawanna, N. Y	16,219	7	10		1				
La Crosse, Wis	31,833	11	1						2
La Fayette, Ind	21,481	5			1	3			
Lakewood, Ohio	23,813	9	2	1					
Lancaster, Ohio	16,086	5							
Lancaster, Pa	51,437		1		4	1		1	
Lawrence, Kans	13,477	7						1	1
Lawrence, Mass	102,923	24	5			4		5	5
Leavenworth, Kans	[1]19,363		8						1
Lebanon, Pa	20,947				22	1		1	
Leominster, Mass	21,365	6			13	1			
Lexington, Ky	41,997	25	1		12	1		9	1
Lima, Ohio	37,145	10	1		32	1	9	1	1
Lincoln, Nebr	46,957	8			2		3		
Little Rock, Ark	58,716	8					2	1	1
Lockport, N. Y	20,028	6			27		2		
Logansport, Ind	21,338	5			1		7		
Long Beach, Calif	29,163	6							
Long Branch, N. J	15,733	1					1		
Lorain, Ohio	38,266	12			1				
Los Angeles, Calif	535,485	124	6	1	4		2	29	18
Louisville, Ky	240,808	87	7	2	3		7	4	15
Lowell, Mass	114,366	29	9	1	7	1	7	5	2
Ludington, Mich	10,566	5							
Lynchburg, Va	33,497	10					3	1	3
Lynn, Mass	104,534	25	3		33	1	10	3	3
McKeesport, Pa	48,299				23			1	
Madison, Wis	31,315	4			23			1	
Mahanoy City, Pa	17,709		2		1		1	1	
Malden, Mass	52,243	4	1				3	5	1
Manchester, Conn	15,859	2					2		
Manchester, N. H	79,697	13	1	1			1	11	3
Manitowoc, Wis	13,931	5	1		20			1	1
Mankato, Minn	[1]10,365	5			5				
Marinette, Wis	[1]14,610	5							
Marion, Ind	19,923	2	1		1		8	1	
Marlboro, Mass	15,285	2						3	
Marquette, Mich	12,555	4			18				
Martinsburg, W. Va	12,984				4		10		
Martins Ferry, Ohio	10,135	1							1
Mason City, Iowa	14,938	7							
Meadville, Pa	13,968						1		
Medford, Mass	26,681	4					1		1
Melrose, Mass	17,724	5			1		1		1
Memphis, Tenn	151,877	49	14		53		6	15	5
Meriden, Conn	29,431		1		2			1	
Methuen, Mass	14,320	4	1				1		
Middletown, Ohio	16,384	6							
Milford, Mass	14,280								1
Milwaukee, Wis	445,008	80	7		8		20	1	16	6
Minneapolis, Minn	373,448	94	12	3	72	2	24	3	20	8
Missoula, Mont	19,075	5			1				
Mobile, Ala	59,201	15			4		1			2
Moline, Ill	27,976	1	7							
Montclair, N. J	27,087	2			1		3			1

[1] Population Apr. 15, 1910.

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New Bedford, Mass	121,622	22	5		11		5		20	3
New Britain, Conn	55,385	14	2	2	9		6			3
New Brunswick, N. J	25,855		1		3		2		3	
Newburgh, N. Y	29,893	11			1		2			1
Newburyport, Mass	15,291	5			1					
New Castle, Pa	41,915						7			
New Haven, Conn	152,275	32	7		4	1	1		6	3
New London, Conn	21,199	6							1	
New Orleans, La	377,010	117	7	1	5		4		26	13
Newport, Ky	32,133	8							1	1
Newport, R. I	30,585	6					3			1
Newton, Mass	44,345	5					1		2	
New York, N. Y	5,737,492	1,258	325	35	221	13	131	5	479	139
Niagara Falls, N. Y	38,466	16					1		2	1
Norfolk, Va	91,148		2	1	3		3			
Norristown, Pa	31,969				19		1			
North Adams, Mass	[1] 22,019	6	1				2			
Northampton, Mass	20,006	6	1						1	
North Attleboro, Mass	11,248	1								
North Tonowanda, N. Y	14,060	5			12				1	
Norwich, Conn	21,923	1	1				2		1	
Norwood, Ohio	23,269	2			5					
Oakland, Cal	206,405	54	9	1	3		9		5	6
Oak Park, Ill	27,816	12	1		61					
Ogden, Utah	32,343	7	6							
Oil City, Pa	20,162				42					
Oklahoma City, Okla	97,588	8					3			2
Olean, N. Y	16,927	6								
Omaha, Nebr	177,777	33	2		37		15			2
Orange, Conn	14,393	6							2	
Orange, N. J	33,636	10					2			1
Parkersburg, W. Va	21,059	8			3		5			
Parsons, Kans	15,952				1				2	
Pasadena, Calif	49,620	21					1		1	4
Passaic, N. J	74,478	19	2				2		1	2
Paterson, N. J	140,512		7		1		1		7	
Pawtucket, R. I	60,666	13	2							
Peekskill, N. Y	19,034	8								1
Pekin, Ill	10,973		1							
Peoria, Ill	72,184	13	2							3
Philadelphia, Pa	1,735,514	593	88	7	157	2	77	2	134	78
Phillipsburg, N. J	15,879	6							1	1
Pine Bluff, Ark	17,777								1	
Pittsburgh, Pa	586,196		22		43		12		14	
Pittsburg, Kans	18,340	4								
Pittsfield, Mass	39,678	8					2		1	1
Pittston, Pa	18,975		1		1					
Plainfield, N. J	24,330	5	1							1
Plymouth, Mass	14,001	5								
Plymouth, Pa	19,439				3					
Pomona, Calif	13,624	2								
Pontiac, Mich	18,006	8	3							2
Port Chester, N. Y	16,727	4					2		2	
Portland, Me	64,730	21					6			1
Portland, Oreg	308,399	55	2		5		27	2	2	2
Portsmouth, N. H	11,730						1		1	
Portsmouth, Ohio	29,356	4								
Portsmouth, Va	40,693	12	1	1						1
Pottsville, Pa	22,717		2		3		2		1	
Poughkeepsie, N. Y	30,786	8	2	1	1		3		1	
Providence, R. I	259,895	54	10				10			
Pueblo, Colo	56,084	1					1		1	

[1] Population Apr. 15, 1910.

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Riverside, Calif.	20,499	3							1	1
Roanoke, Va.	46,282	7			41		6			
Rochester, N. Y.	264,714		8	1	7		19		6	4
Rockford, Ill.	56,739	10			11	1	4			
Rock Island, Ill.	29,452	3							1	
Rocky Mount, N. C.	12,673	4								
Rome, N. Y.	24,259						1		3	
Rutland, Vt.	15,098	4					1			
Sacramento, Calif.	68,984	18	1				2		3	3
Saginaw, Mich.	56,469	12	2				3			1
St. Cloud, Minn.	12,013				16					
St. Joseph, Mo.	86,498	26	1				2			1
St. Louis, Mo.	768,630	171	73	3	106	3	18		37	14
Salem, Mass.	49,346		6				9		3	
Salem, Oreg.	21,274	9							1	2
Salt Lake City, Utah	121,623	34	5		1		3			4
San Angelo, Tex.	[1] 10,321	6								3
San Antonio, Tex.	128,215	6	1						6	5
San Bernardino, Calif.	17,616	6								3
San Diego, Calif.	56,412	17	5				1		12	3
Sandusky, Ohio	20,226	3			2				1	
San Jose, Calif.	39,810								1	
Santa Barbara, Calif.	15,360	5								
Santa Cruz, Calif.	15,150	5								1
Saratoga Springs, N. Y.	13,839	7			2				1	
Saugus, Mass.	10,210	1	1		5		2		2	
Sault Ste. Marie, Mich.	14,130	2								
Savannah, Ga.	69,250								4	2
Schenectady, N. Y.	103,774	16	1				3		12	1
Scranton, Pa.	149,541		4		1		10		3	
Shamokin, Pa.	21,274		5		10					
Shenandoah, Pa.	29,753		3						2	
Sioux City, Iowa	58,568	1	2							
Sioux Falls, S. Dak.	16,887	9			5		2			2
Somerville, Mass.	88,618	13	2		3		9		5	
South Bend, Ind.	70,967	11	1		2		1			1
Southbridge, Mass.	14,465	5			1				1	
Spartanburg, S. C.	21,985	7								2
Spokane, Wash.	157,656				2		14			
Springfield, Ill.	62,623	24								2
Springfield, Mass.	108,668	43	2				6		3	4
Springfield, Mo.	41,169	15								1
Springfield, Ohio	52,296	16			9		1		1	
Steelton, Pa.	15,759				10					
Steubenville, Ohio	28,259	6								
Stockton, Calif.	36,209	13								2
Streator, Ill.	14,313	4								
Sunbury, Pa.	16,661				1					
Superior, Wis.	47,167	5	2		1		1			
Syracuse, N. Y.	158,559	37	3	1	1		9		5	3
Tacoma, Wash.	117,446				11		2		1	
Taunton, Mass.	36,610	7	1		5				1	
Toledo, Ohio	202,010		4		91	1	13		13	6
Topeka, Kans.	49,538	17	2		1					2
Trenton, N. J.	113,974	28	1		42	1			7	3
Troy, N. Y.	78,094	28	12		1				7	5
Tulsa, Okla.	32,507				1					
Tuscaloosa, Ala.	10,824	2	2						1	
Vallejo, Calif.	13,803	1	1							
Vancouver, Wash.	13,805		2							
Wakefield, Mass.	12,947				1				1	
Walla Walla, Wash.	26,067						6			
Waltham, Mass.	31,011	5			2		1		5	1

[1] Population Apr. 15, 1910.

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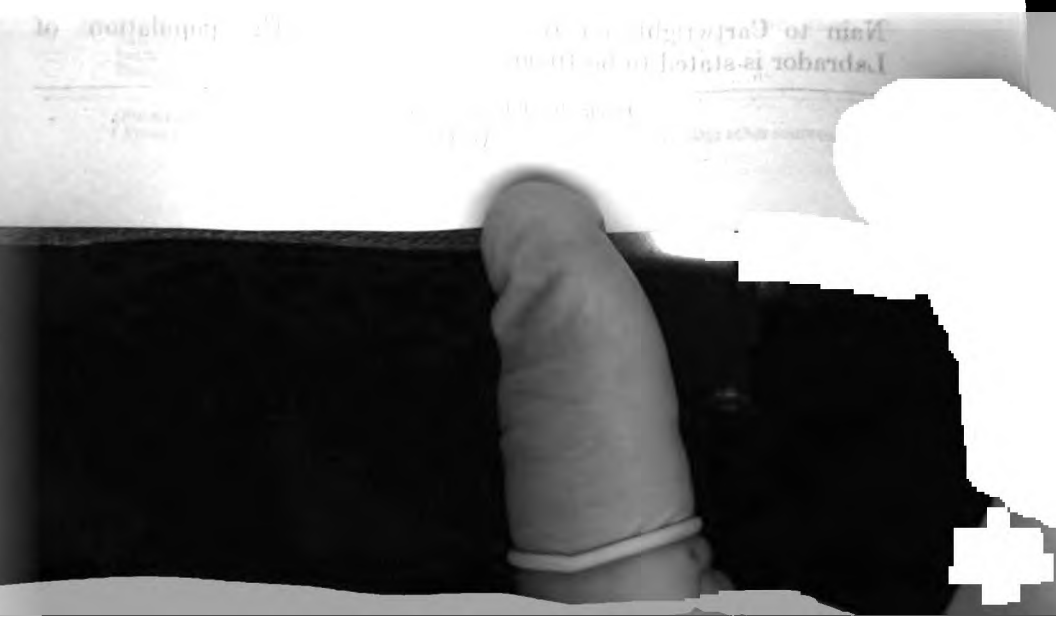
Winthrop, Mass.	13,105	.....	.....	.....	1	.....	.....	.....	2	.....
Woburn, Mass.	16,076	3	.....	.....	.....	.....	.....	.....	.....	.....
Worcester, Mass.	166,106	58	6	.....	62	.....	6	.....	9	5
Yakima, Wash.	22,058	.....	.....	.....	6	.....	4	.....	.....	.....
Yonkers, N. Y.	103,066	16	.....	.....	6	.....	2	.....	.....	2
Youngstown, Ohio	112,282	27	3	.....	89	.....	10	.....	3	5
Zanesville, Ohio	31,320	10	.....	.....	.....	.....	.....	.....	1	1

[1] Population Apr. 15, 1910.



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FOREIGN.

CHINA.

Influenza—Shanghai—March, 1919.

According to information received under date of April 19, 1919, there were notified at Shanghai, China, during the month of March, 1919, 342 fatal cases of influenza occurring among Chinese and 22 among foreigners, of whom 14 were Japanese. The total mortality at Shanghai during March, 1919, was stated to have been the highest on record, namely, 66 deaths among foreigners and 1,177 among Chinese.

The first outbreak of influenza at Shanghai was stated to have occurred in May, 1918, with 3 fatalities among foreigners and 182 among Chinese.[1] The second outbreak was reported in October, 1918, with 6 fatalities among foreigners and 266 among Chinese.

Plague—Hongkong.

During the week ended June 7, 1919, 41 cases of plague with 37 deaths were reported at Hongkong, China.

FINLAND.

Smallpox—Typhus Fever—April 1-15, 1919.

During the period April 1 to 15, 1919, 158 cases of smallpox and 10 cases of typhus fever were notified in Finland. The cases of smallpox were distributed according to Provinces as follows: Abo Och Björneborg, 1 case; Kuopio, 19 cases; Nyland, 4 cases; St. Michael, 15 cases; Tavastehus, 7 cases; Vasa, 10 cases; Viborg, 102 cases. Of the typhus cases, 8 were notified in the Province of Abo Och Björneborg, 1 case in the Province of Nyland, and 1 case in the Province of Viborg.

LABRADOR.

Influenza—March, 1919.

There were reported in Labrador March 8, 1919, 150 fatal cases of influenza occurring within an area of approximately 250 miles from Nain to Cartwright, on the Atlantic coast. The population of Labrador is stated to be 10,000.

[1] Public Health Reports, Apr. 25, 1919, p. 572.

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NEWFOUNDLAND.

Influenza—January–May, 1919.

nfluenza was present in Newfoundland during the period from ember 28, 1918, to January 31, 1919, with 1,464 cases repórted; n February 1 to 28, with 44 cases; from March 1 to 28, with cases; from March 29 to April 25, with 47 cases. During the od from April 26 to May 9 influenza was reported present. greatest diffusion of the disease was noted in January, occurring rding to weeks as follows: Week ended January 3, present in 8 lities, January 10, in 15 localities, January 17 and 24, in 8 local- each, January 31, in 3 localities; during February about 6 lities were reported infected; during March, 4 localities, and in l, about 8 localities.

NEW ZEALAND.

Influenza—March–April, 1919.

ıring the period from March 27 to April 10, 1919, influenza was rted present in New Zealand with 127 cases.

OCEANIA.

Influenza—Fiji Islands—Pelew Islands—Solomon Islands.

fluenza has been reported present in islands of the Pacific Ocean lows: Fiji Islands, March 31 to April 8, 1919, 29 cases occurring ur localities; Pelew Islands, in the Caroline group, during the ended March 22, about 40 cases among natives; Solomon ds, in April, a mild epidemic, not pneumonic in form, reported ɔortion of the islands.

luenza was reported present in the Fiji Islands in December, with a high mortality.[1]

ERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER.

Reports Received During Week Ended June 13, 1919.[2]

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
ıtta	Apr. 6–19		529	
ɡoon	Mar. 23–Apr. 5	16	12	
Java				Feb. 21–Mar. 14, 1919: Cases, 803; deaths, 575.
Java				Mar. 7–13, 1919: Cases, 2.
atavia	Mar. 7–13	2		
ıe Islands:				
inces				Apr. 13–19, 1919: Cases, 61; deaths, 39.
atangas	Apr. 13–19	6	6	
aguna	do	29	15	
ampanga	do	26	18	

[1] Public Health Reports, Mar. 7, 1919, p. 483.
[2] From medical officers of the Public Health Service, American consuls, and other sources.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended June 13, 1919—Continued.

PLAGUE.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Porto Alegre	Apr. 1-30			Present.
Ceylon:				
Colombo	Mar. 30-Apr. 5	1		
China:				
Hongkong	June 7	41	37	
Ecuador:				
Guayaquil	Apr. 1-30	1	1	
Egypt				Jan. 1-May 1, 1919 (case, 28 deaths, 144.
Cities—				
Suez	Apr. 23-29	17	9	1 case septicemic
Provinces—				
Fayoum	Apr. 26	13	5	
India				Mar. 30-Apr. 5, 1919 (cases, 1,92 deaths, 1,458
Calcutta	Apr. 6-19		62	
Karachi	Apr. 13-19	18	16	
Rangoon	Mar. 23-Apr. 5	85	83	
Java:				
Mid-Java				Feb. 21-Mar. 14, 1919 Cases, 6, death, 95
Mesopotamia:				
Bagdad	Mar. 22-Apr. 11	98	69	

SMALLPOX.

Arabia:				
Aden	Apr. 14-21		1	
Austria				Feb. 9-Mar. 15, 1919 Cases, 8
Vienna	Feb. 9-Mar. 15	28		
Bohemia:				
Gablonz	Feb.-Mar.	974	19	
Brazil:				
Bahia	Mar. 30-Apr. 5	5		
Rio de Janeiro	Feb. 16-Mar. 22	17	3	
Canada:				
Nova Scotia—				
Halifax	May 18-24	18		Present in 20 other localities.
Ontario—				
Ottawa	May 25-31	1		
Quebec—				
Quebec	May 18-24	4		
Ceylon:				
Colombo	Mar. 20-Apr. 5	1		Mar. 23, 1919: One case from S. Tilmaros from Egypt. Ma 27: Case on S. S. Europa from England via Boston.
China:				
Chungking	Apr. 6-19			Present
Hankow	Apr. 13-19	1		
Nanking	Apr. 20-26			Do.
Tsingtao	Apr. 28-May 4	1		
Chosen (Korea):				
Chemulpo	Mar. 1-31	1	1	
Fusan	do	20	11	
Seoul	do	2	1	
Egypt:				
Alexandria	Apr. 23-29	10	5	
Finland				Apr. 1-15, 1919 Cases, 188
Provinces—				
Abo Och Björneborg	Apr. 1-30	1		
Kuopio	do	19		
Nyland	do	4		
St. Michael	do	15		
Tavastehus	do	7		
Vasa	do	10		
Viborg	do	102		
Germany				Feb. 16-Mar. 22, 1919 Cases, 22 among soldiers and prisoners of war, 765 cases.
Great Britain:				
London	Apr. 13-26	6	1	
India:				
Calcutta	Apr. 6-12		220	
Karachi	Apr. 13-19	14	7	
Rangoon	Mar. 23-Apr. 5	196	90	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended June 13, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
y:				
Naples	May 5-11	53	31	
an:				
Kobe	Apr. 20-26	40	10	
a:				
West Java				Feb. 28-Mar. 13, 1919: Cases, 127; deaths, 19.
churia:				
Dairen	Apr. 22-28	1		
ico:				
Guadalajara	Apr. 1-30	1		
foundland:				
St. John's	May 16-22	8		Outports, 26 cases; present at Blaketown and vicinity of Greenspond.
ippine Islands:				
Manila	Apr. 13-19	2	1	1 varioloid.
ugal:				
Oporto	Apr. 27-May 10	20	15	
n:				
Barcelona	Mar. 27-Apr. 16	4		
s:				
Tunis	Apr. 26-May 1	1	1	
essels:				
S. S. Euripides	Mar. 21	1		From England via Suez and Colombo. Case removed at Colombo. Vessel arrived Fremantle, Australia, Apr. 10.
S. S. Port Sydney	Mar. 13	1	1	From Egypt to Australia via Colombo. Arrived Fremantle Mar. 31.
S. S. Ulimaroa	Mar. 26	1		From Egypt via Colombo. Case developed after arrival at Colombo. Vessel arrived at Fremantle, Australia, Apr. 8.

TYPHUS FEVER.

ia				Feb. 9-Mar. 15, 1919: Cases, 322.
enna	Feb. 9-Mar. 15	291		
:				
io de Janeiro	Feb. 16-22	1		
:				
exandria	Apr. 22-29	98	35	
id				Apr. 1-15, 1919: Cases, 10.
ovinces—				
Abo Och Björneborg	Apr. 1-15	8		
Nyland	do	1		
Viborg	do	1		
Britain:				
eenstown	Mar. 16-22		1	
ry				Jan. 13-Feb. 2, 1919: Cases, 263.
dapest	Jan. 13-Feb. 2	131	7	
breczin	Jan. 20-Feb. 2	42		
skolcz	do	15		
ezzo Province	Apr. 7-13	4		At Arezzo.
lluno Province	do	1		
rence	do	21		
ples	May 5-11	6		
vara Province	Apr. 7-13	1		
ranto	do	2		
ine Province	do	13		At Cividale, 11 cases; Udine, 2.
ptamia.				
gdad	Mar. 22-Apr. 11	6	2	
:				
ndalajara	Apr. 1-30	5	3	
lands:				
sterdam	Apr. 6-12	2		
tterdam	do	3	1	
al:				
rto	Apr. 27-May 10	185		
grade	Feb. 5	62		
is	Apr. 26-May 1		1	

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Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombia	Nov. 17–30	4	5	
China:				
Swatow	June 3			Present.
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13–19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18–Dec. 28	1,351	1,031	
Do	Dec. 29–Mar. 22	9,691	8,510	
Calcutta	Sept. 20–Dec. 21		241	Reports for weeks ended Nov. 23, 1918, and Mar. 29, 1919, missing.
Do	Dec. 29–Apr. 5		1,154	
Karachi	Jan. 26–Mar. 22	3	3	
Madras	Oct. 5–Dec. 28	264	164	Oct. 27–Nov. 2, 1918: Cases, 9; deaths, 4.
Do	Jan. 5–Apr. 19	430	300	
Rangoon	Oct. 5–Dec. 21	35	35	
Do	Dec. 29–Mar. 22	41	33	
Indo-China				July 1–Oct. 31, 1918: Cases, 753; deaths, 472.
Anam	July 1–Aug. 31	37	30	
Cambodia	July 1–Oct. 31	324	171	
Cochin China	do	436	337	
Saigon	Oct. 7–Dec. 22	75	45	
Do	Dec. 3–Apr 6	563	348	
Kwang-Chow-Wan	July 1–31	50	34	
Tonkin	July 1–Oct. 31	6		
Java:				
East Java				Oct. 7–Dec. 31, 1918: Cases, 381; deaths, 323. Jan. 1–Mar. 27, 1919: Cases, 756; deaths, 719.
Surabaya district	Oct. 7–Dec. 31	655	423	
Do	Jan. 1–Mar. 17	387	282	
Mid-Java				Sept. 25–Dec. 18, 1918: Cases 3,282, deaths, 2,014. Jan. 24–Feb. 20, 1919: Cases, 1,183; deaths, 928.
Samarang	Sept. 26–Oct. 16	120	111	
West Java				Oct. 3–Dec. 11, 1918: Cases, 412; deaths, 238. Dec. 27, 1918–Jan. 23, 1919: Cases, 10; deaths, 3.
Batavia	Oct. 3–Dec. 11	291	148	
Do	Dec. 27–Jan. 23	8	2	
Cheribon	Jan. 3–9	1		
Mesopotamia:				
Bagdad	Oct. 11–18	8		
Philippine Islands:				
Manila	Sept. 22–Dec. 28	209	135	
Do	Dec. 29–Apr. 19	51	23	
Provinces				Nov. 2–Dec. 28, 1918: Cases, 1,986; deaths, 1,515. Dec. 29, 1918–Apr. 19, 1919: Cases, 1,454; deaths, 1,022.
Albay	Dec. 15–21	1	1	
Ambos Camarines	Feb. 15–21	10	2	
Bataan	Nov. 17–Dec. 28	38	32	
Batangas	Nov. 2–Dec. 28	258	230	
Do	Dec. 29–Apr. 19	90	66	
Do	Apr. 6–12	5	2	
Bohol	Nov. 2–Dec. 28	29	24	
Do	Dec. 29–Mar. 29	88	55	
Do	Apr. 6–12	10	6	
Bulacan	Oct. 12–Dec. 28	51	8	
Do	Dec. 29–Feb. 21	42		
Capiz	Dec. 22–28	7	5	
Do	Jan. 5–25	28	14	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 6, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Continued.				
Provinces—Continued.				
Cavite	Oct. 27-Dec. 21	207	115	
Do	Dec. 29-Apr. 19	18	17	
Cebu	Nov. 10-Dec. 21	50	27	
Do	Jan. 12-Apr. 19	20	15	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 15	56	38	
Iloilo	Oct. 27-Dec. 21	112	78	
Do	Jan. 5-Mar. 29	194	125	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Apr. 19	182	145	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 21-30	7	14	
Misamis	Oct. 27-Nov. 2	6	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-Mar. 29	194	88	
Nueva Ecija	Jan. 12-25	9	6	
Occidental Negros	Feb. 2-Mar. 21	8	5	
Oriental Negros	Nov. 2-Dec. 7	32	18	
Do	Jan. 5-Feb. 8	35	22	
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Apr. 19	118	83	
Pangasinan	Nov. 2-Dec. 28	930	652	
Do	Dec. 29-Apr. 19	169	131	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-Feb. 8	44	36	
Tayabas	Nov. 3-Dec. 28	60	40	
Do	Dec. 29-Feb. 15	69	62	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-Feb. 8	25	21	
Russia:				
Black Sea district	Oct. 2-Nov. 27	5		
Warsaw	Sept. 29-Oct. 26	5	1	
Serbia:				
Petrograd	To July 16	3,388	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals: In military hospitals, July 5-Aug. 21, 1918: Cases, 864; deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 279.
Siberia:				
Ekaterinaslav	Sept. 1-20	7	6	
Odessa	do	25		Sept. 1-20, 1918: 11 cases on s. s. Helena.

PLAGUE.

Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
Do	Feb. 9-Mar. 22	13	10	
China:				
Amoy	Nov. 24-Dec. 8			Present.
Amoyking	Dec. 1-7			Do.
Chang-Ning district	Mar. 15			Do.
Hongkong	Oct. 1-Dec. 28	4	4	
Do	Jan. 1-Apr. 5	44	39	May 4-17, 1919: Deaths, 65. May 18-31, 1919: Cases, 71.
Peru:				
Callao	Feb. 16-Mar. 16	2	1	
Guayaquil	July 1-Dec. 31	20	7	
Do	Jan. 1-Apr. 15	55	17	
Lima	Dec. 16-31	1	1	
Turkey—				Jan. 1-Nov. 21, 1918: Cases, 357 deaths, 153. Jan. 1-Apr. 10, 1919: Cases, 130; deaths, 96.
Ports—				
Alexandria	Mar. 23	1	1	
Suez	Jan. 31-Apr. 7	40	25	
Provinces—				
Assiout	Feb. 24-Apr. 5		2	1 septicemic.
Girgeh	Feb. 22-Mar. 22	10	5	2 pneumonic.
Minieh	Feb. 21-27	2	2	1 pneumonic.

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Cambodia	do	72	72	
Cochin-China	do	65	35	
Saigon	Oct. 7-Nov. 24	5	1	
Do	Jan. 13-Apr. 6	23	19	City and vicinity.
Kwang-Chow-Wan	July 1-31	1	1	
Java:				
East Java				Oct. 7-Nov. 18, 1918: Cases, 169; deaths, 109. Jan. 1-Feb. 23, 1919: Cases, 179; deaths, 179.
Surabaya (district)	Oct. 7-Dec. 31	92	92	
Do	Jan. 1-Feb. 25	49	49	
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 14; deaths, 14. Jan. 30-Feb. 11, 1919: Cases, 110; deaths, 110.
Samarang	Sept. 25-Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16-29	5	2	
Do	Feb. 22-Mar. 14	65	20	
Siam:				
Bangkok	Sept. 21-Oct. 12	6	5	
Do	Jan. 19-Feb. 22	7	6	
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.
S. S. Sparta	May 21	1	1	At Liverpool, England, from Bombay.

SMALLPOX.

Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
Do	Mar. 1-31	1	1	
Austria				Dec. 1, 1918-Jan. 11, 1919: Cases, 68. Jan. 12-Feb. 8, 1919: Cases, 57.
Vienna	Dec. 1-Jan. 11	6		
Bohemia				Feb., 1919: Reported prevalent. Mar., 1919: Cases, 57.
Gablonz	Mar. 1-31	26		
Brazil:				
Rio de Janeiro	Dec. 1-28	46	19	Oct. 6-12, 1918: Cases, 15; deaths, 10.
Do	Dec. 30-Jan. 25	25	11	
Sao Paulo	Mar. 3-16		2	
British East Africa:				
Mombasa	Sept. 1-Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-18	2		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 22	6		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 10			Do.
Cape Sable Island	May 13			Present on south side.
Digby	Jan. 4			Present.
Halifax	Dec. 7-28	10		
Do	Jan. 5-May 17	361		
Middleton	Dec. 29-Jan. 4			Do.
Sydney	Jan. 5-Mar. 8	4		
Do	Mar. 23-May 10	10		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 6, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
la—Continued.				
ntario—				
North Bay	Jan. 19–25	1		
Ottawa	Jan. 12–Apr. 12	13		
Toronto	Feb. 2–15	2		
Do	Mar. 16–22	1		
rince Edward Island—				
Charlotte Town	Feb. 27–Apr. 16	2		
uebec—				
Montreal	Jan. 24–Dec. 21	2		
Do	Jan. 12–May 10	32		
Paspebiac	Jan. 12–Mar. 8	8		
Quebec	Dec. 15–21	1		
Do	Dec. 29–May 17	23		
i:				
lombo	Jan. 12–Mar. 29	4		
uoy	Oct. 13–Dec. 28			Present.
Do	Mar. 11–Apr. 12	4	3	Do.
tung	Feb. 10–16	1		
Do	Feb. 24–Mar. 2	1		
nton	Nov. 17–23			Do.
Do	Feb. 9–15			Do.
angsha	Mar. 16–Apr. 12	5		
ungking	Nov. 10–Dec. 28			Do.
Do	Jan. 5–Apr. 5			Do.
chow	Nov. 24–Dec. 28			Do.
Do	Dec. 29–Apr. 5			Do.
ngkong	Dec. 15–21	1	1	
Do	Feb. 2–8	1		
Do	Feb. 16–Apr. 12	9	3	
iking	Dec. 1–28			Do.
Do	Dec. 29–Apr. 19			Do.
nghai	Jan. 20–26	1		
ngtao	Mar. 3–9	1		
(Korea):				
mulpo	Nov. 1–Dec. 31	15	4	
Do	Jan. 1–Feb. 28	15	6	
n	Feb. 1–28		5	
l	do	1		
a:				
ranquilla	Apr. 6–12		1	
k:				
nhagen	Nov. 9–Dec. 28	12		
Do	Dec. 29–Apr. 5	104		
andria	Dec. 17–23	1	1	
Do	Jan. 22–Apr. 22	26	10	
				Jan. 1–Mar. 31, 1919: Cases, 778.
inces				
Abo Och Björneborg	Jan. 1–Mar. 31	90		
Kuopio	do	169		
Nyland	do	21		
St. Michael	do	120		
Tavastehus	do	9		
Uleaborg	do	1		
Vasa	do	6		
Viborg	do	362		
leaux	Feb. 8–13		1	
t	Feb. 2–8	1		
	Mar 2–Apr. 19	13	3	
				Nov. 24–Dec. 7, 1918: Cases, 31.
den	Nov. 24–Dec. 7	18		
	do	4		
land	do	1		
gsberg	do	8		In persons evacuated from the Ukraine.
euditz	do	1		
	do	1		
au	do	1		
				Dec. 8, 1918–Jan. 11, 1919: Cases, 177. Additional cases reported later, 54, for week ended Jan. 11.
e-Chapelle (district)	Dec. 8–Jan. 11	17		
l	do	10		
g	do	3		
thal	do	8		District of Gumbinnen.
lau	Dec. 8–Feb. 15	247		26 additional cases reported later at Dresden.
	Dec. 8–Jan. 11	5		Among interned Russians.
ver	do	7		

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Madras	Oct. 5–Dec. 28	62	40	
Do	Dec. 29–Apr. 19	295	131	
Rangoon	Oct. 20–Dec. 21	32	6	
Do	Dec. 29–Mar. 22	817	305	
Indo-China:				
Anam	July 1–Oct. 31	146	67	
Cambodia	Aug. 1–Oct. 31	165	74	July 1–Oct. 31,
Cochin-China	July 1–Oct. 31	400	112	deaths, 254.
Saigon	Oct. 7–Dec. 22	20	5	
Do	Dec. 30–Apr. 6	119	21	City and vicinit
Tonkin	July 1–Oct. 31	20	1	
Italy:				
Andria	Mar. 10–16	1		Province of Bar
Barletta	Mar. 3–9	2		Do.
Genoa	Jan. 9–Mar. 15	4	2	
Lecce (Province)	Feb. 17–23	2		
Leghorn	Apr. 14–30	1		
Messina	Mar. 2–30	4		Cases reported
Naples	Mar. 10–16	2		ties in Provin
Palermo	Jan. 31–Apr. 16	53	2	
Turin	Jan. 27–Mar. 23	9	2	
Japan:				
Kobe	Oct. 26–Dec. 28	186	46	
Do	Dec. 29–Apr. 19	556	195	
Nagasaki	Mar. 31–Apr. 6	3		
Nagoya	Mar. 2–15	2		
Taihoku	Jan. 15–Apr. 15	151	18	Island of Form
Yokohama	Jan. 20–26	1		
Java:				
East Java				Oct. 7–Dec. 31,
Surabaya (district)	Oct. 7–Dec. 31	16		deaths, 1. Ja
Do	Jan. 1–Feb. 25	4	2	Cases, 4; deat
Mid-Java				Sept. 25–Dec. 18
				deaths, 3.
				Case, 1.
West Java				Oct. 2–Dec. 11,
Batavia	Oct. 2–Dec. 11	185	151	deaths, 263.
Do	Dec. 27–Mar. 27	49	27	Mar. 27, 191
				deaths, 99.
Lithuania				Sept. 1–Oct. 16
Manchuria:				
Dairen	Jan. 15–21	1		
Do	Feb. 22–Apr. 14	4	2	
Mesopotamia:				
Bagdad	Oct. 11–Dec. 27	308	97	
Do	Dec. 28–Feb. 9	8		
Mexico:				
Ciudad Juarez	Nov. 24–30	1		
Guadalajara	Mar. 1–31	1		
Do	Mar. 29–Apr. 5	1		
Mexico City	Sept. 22–Dec. 28	23		
Do	Dec. 29–May 3	28		
Vera Cruz	Feb. 10–Apr. 12	2	1	
Newfoundland				Outports—Dec.
St. Johns	Dec. 6–20	4		78. Dec. 28, 1
Do	Jan. 24–May 16	42		Cases, 307.
Panama				Aug. 1–31, 1918
Colon	Dec. 15–21	1		curring at Col
Do	Dec. 29–Feb. 9	8		points in th
				1–25, 1919: Ca

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 6, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
ppine Islands:				
anila	Nov. 2-16	5	3	
Do	Dec. 29-Apr. 12	41	21	Varioloid, 16.
gal:				
isbon	Nov. 16-Dec. 28	843		
porto	Mar. 9-Apr. 26	128	83	
guese East Africa:				
urenco Marques				July 1-Oct. 31, 1918: 45 fatal cases.
a:				
adivostok	Nov. 1-3	4		
Do	Jan. 17-23		1	
Do	Feb. 1-Mar. 15	16	1	
rcelona	Jan. 9-Feb. 11		5	
Do	Feb. 19-Apr. 9	2	2	
lbao	Jan. 1-Feb. 20	6		
diz	Oct. 1-Dec. 31	18		
Do	Jan. 1-Mar. 31		35	
drid	Sept. 1-Oct. 31	153		
Do	Jan. 1-Mar. 31		81	
ille	Nov. 1-Dec. 31		8	
Do	Jan. 1-Mar. 31		5	
lencia	Nov. 10-Dec. 21	40	9	
Do	Dec. 29-Jan. 25	93	10	
Do	Feb. 16-Apr. 26	516	45	
Settlements:				
ang	Oct. 6-12	1		
gapore	Feb. 2-22	3		
:				
ckholm	Feb. 2-8		1	
f South Africa:				
e Town	Aug. 1-30	1		
Do	Dec. 21-Jan. 31	1		
nnesburg	Aug. 1-Oct. 31	12		Nov. 1-30: Cases, 4.

TYPHUS FEVER.

ars	Nov. 1-30	1		
				Dec. 1, 1918-Jan. 11, 1919: Cases, 125. Jan. 12-Feb. 8, 1919: Cases, 157.
na	Dec. 1-Jan. 11	110		Occurring almost exclusively in repatriated soldiers and their contacts.
Do	Jan. 12-Feb. 8	119		
	Sept. 2-8	2		Sept. 9-Nov. 26, 1918: Cases, 110; deaths, 8. Nov. 27, 1918-Jan. 12, 1919: Cases, 210.
pest	Sept. 9-Nov. 26	73	2	
Do	Nov. 27-Jan. 12	159		
sburg	Sept. 9-Nov. 26	11	1	
ar	Nov. 4-26	1		
narnemeti	do	1		Present, county of Bihar.
	Sept. 14-21	1		
le Janeiro	Dec. 15-22	2		
Do	Dec. 29-Feb. 15	28	3	
Paulo	Jan. 13-19	3		
ren	Mar. 10			Present.
chuk	do			Do.
ng	Dec. 2-15	2		
o	Jan. 6-Apr. 20	3	1	
Corea):				
	Feb. 1-28	1	1	
	Jan. 1-Feb. 28	12	1	
nquilla	Nov. 8-Dec. 28		3	
o	Jan. 5-Mar. 8	2	3	
ndria	Oct. 14-Dec. 31	85	36	
o	Jan. 1-Apr. 22	627	163	Confined to one quarter of city and mostly to natives. Oct. 20-Nov. 7, 1918: Cases, 12; deaths, 1.

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Cork	Feb. 2–22	4		
Glasgow	Dec. 22–28	5		
Do	Jan. 5–Feb. 8	9	1	
Do	Mar. 9–15	1		
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29–Dec. 21		34	
Do	Dec. 29–Apr. 5		107	
Italy:				
Bari	Feb. 3–9	19		In soldiers ret
Leghorn	Apr. 14–27	9	2	Sea.
Naples	Feb. 3–9	3		
Taranto	do	2		Do.
Japan:				
Nagasaki	Nov. 10–Dec. 29	13	4	
Do	Dec. 30–Apr. 20	38	5	
Java:				
East Java				Oct. 7–21, 1918
Surabaya	Oct. 7–21	4		
Mid-Java				Sept. 25–Oct. 1
West Java				Oct. 2–23: Case
Batavia	Oct. 2–23	15	4	
Lithuania				Sept. 1–Oct. 2 deaths, 26.
Macedonia:				
Drama	Mar. 17			Present.
Epirus	Mar. 21			Do.
Kavala	Mar. 17	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5–Dec. 27	2		
Do	Dec. 28–Mar. 21	9		
Mexico:				
Aguascalientes	Feb. 2–23		3	
Do	Mar. 24–Apr. 13		4	
Guadalajara	Nov. 1–Dec. 31	4	1	
Do	Jan. 1–Mar. 31	4	2	
Mexico City	Sept. 22–Dec. 28	434		
Do	Dec. 29–May 3	644		
Netherlands:				
Amsterdam	Dec. 8–14	1		
Do	Jan. 12–18	4		
Delft	Feb. 26			Present
Harlem	do			Do.
Leiden	do			Do.
Limburg	do	5	1	Mining district.
Rotterdam	Feb. 2–Apr. 5	504	89	Jan. 30–Feb. 27 deaths, 46.
Schiedam	Feb. 26			Present. Sept. Cases, 572; de
Poland:				
Lodz	Sept. 29–Oct. 26	55	8	
Warsaw	do	111	13	
Portugal:				
Braga	Mar. 24			
Oporto	Mar. 8–Apr. 26	724		
Russia:				
Archangel	Jan. 15–Mar. 15	233	61	

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HOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 6, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
bia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
ria:				
Vladivostok	Sept. 1-Dec. 30	43		
Do	Jan. 17-Mar. 15	143	15	
in:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
is:				
Tunis	Apr. 12-25	2	1	
aine				Apr. 5, 1919: Reported to be spreading.
on of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

il:				
Bahia	Jan. 12-Mar. 1	5	2	
Pernambuco	Oct. 1-Nov. 30	2	1	
nbia:				
Cartagena	Jan. 29-Feb. 4		4	
dor:				
Babahoyo	Nov. 1-30	1		
Do	Mar. 1-15	1		
Catarama	Feb. 1-15	1		
Chobo	Jan. 1-15	1		
Daule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-Mar. 15	5	1	
Guayaquil	July 1-Dec. 31	326	177	
Do	Jan. 1-Mar. 31	124	68	
Hacienda Vainilla	Feb. 16-28	1		
Milagro	Nov. 1-15	1		
Do	Feb. 1-Mar. 15	2	1	
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-Feb. 28	2	2	
ayo (Hacienda)	Nov. 1-15	1		
unta de Piedra	Nov. 1-30	1		
dor:				
an Salvador	Jan. 9	1		
ssel:				
S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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maculatus has been found to be infected. This latter point, he states, is of considerable sanitary importance, since it was used to determine the date at which the service stopped oiling last autumn, entailing a saving of about $10,000.

Mr. Mayne's report acquires increased significance when combined with the corroborating observations made by Dr. Metz, who, in 1918, found two specimens of *Anopheles crucians* infected in nature.

The Occurrence of Malaria Parasites in Anopheles Crucians in Nature: Percentage of Infection of Anopheles Quadrimaculatus and Latest Date Found Infected in Northern Louisiana.

By BRUCE MAYNE, Biologist, United States Public Health Service.[1]

The finding of maturely developed *Plasmodium* in the gut wall or salivary glands in artificially infected mosquitoes kept under laboratory conditions has been held by numerous investigators as ample proof of the susceptibility of a species as an efficient host. The three American species of Anopheles, namely, *A. quadrimaculatus*, *A. punctipennis*, and *A. crucians*, have been reported as capable of harboring the organisms of malarial fever under experimental conditions. Several workers have discovered American Anopheles in the rôle of carriers under natural environments. Within the past few years *Anopheles quadrimaculatus* has been found both with oocyst infection of the gut and with salivary gland sporozoites. On only one occasion a specimen of *A. punctipennis* has been found in nature with stomach infection, and that with a single oocyst. *A. crucians*, which is first reported by the writer as a host of *Plasmodium vivax*

[1] The author's name has been legally changed; it was formerly M. Bruin Mitzmain.

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the presence of viable gland sporozites.

A preliminary survey at Lenwil among 250 mill emp their families gave a history index of malaria infection cent and a parasite index of 22 per cent. On August 2 lected specimens of *A. quadrimaculatus* were shown to Dissections of anopheline mosquitoes were continued wi ruption until the latter part of November. The la mosquito was captured October 20.

The following table indicates the dates of collecting the which proved upon dissection to be harboring organisms

TABLE 1.—*Dates collected, species and number of each found to be*

Date dissected.	Number of specimens.			Specimens	
	Quadrimaculatus.	Punctipennis.	Crucians.	Quadrimaculatus.	
1917.					
Aug. 23–26	46		1		
Aug. 27	29	1		2	
Aug. 29	3				
Aug. 30	3				
Aug. 31	20		1		
Sept. 1	11			1	
Sept. 6	8				
Sept. 7	24			1	
Sept. 8	8				
Sept. 10	5				
Sept. 11	10				
Sept. 13	39			1	
Sept. 14–20	125				
Sept. 22	40			1	
Sept. 24–Oct. 4	155	1			
Oct. 6	10			4	
Oct. 7	5			1	
Oct. 8	17			2	
Oct. 10	13				
Oct. 11	9		1	1	
Oct. 12	9			1	
Oct. 15	20	1	1	1	
Oct. 16–19	31	1			
Oct. 20	2			1	
Oct. 22–Nov. 25	67	13	16		
Total	709	17	20	17	

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ANOPHELES CRUCIANS WIED. AS AN AGENT IN MALARIA TRANSMISSION.

By C. W. METZ, Ph. D., Special Investigator, United States Public Health Service.

So far as the writer is aware there is little published evidence upon which to judge the importance of *Anopheles crucians* Wied. as a vector of malaria in nature. The species is known to be a suitable host for the parasite of æstivo-autumnal and tertian malaria (Mitzmain, 1916 (a), (b)) and to transmit at least the former type under laboratory conditions (Mitzmain 1916 (a), King 1916), but no available literature records the finding of infected specimens in nature. Beyer and his coworkers and Dupree are reported by various authors to have found cases of this sort, but the reports are, according to King (1916), based upon a misinterpretation of the statements of these investigators.

Epidemiological considerations and observations on the habits of *crucians* have led to indefinite conclusions. According to King the incrimination of *crucians* by Beyer and his associates was based upon epidemiological findings. On the other hand the apparent absence of any marked tendency on the part of *crucians* to enter dwellings has argued against its efficiency as a vector. It may be considered a relatively open question, therefore, whether *crucians* is or is not of practical importance—certainly the question is not yet settled.

In arriving at a conclusion in this case it is of primary importance to determine the relative frequency with which *crucians* bites man under conditions suitable for malaria transmission. The preser

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records are significant because, in obtaining them, a thoro
was made of all available hiding places. The buildings
mainly of houses and sheds, with a few stables and privi
or two pigpens. The results are summarized as follo
houses 415, inside houses 2, in stables 111, in pigpens 25,
in sheds 45, under bridges 35. These observations all ap
locality—outskirts of Montgomery, Ala., on the west.

Subsequently more extended observations were mad
County, Fla., where *Anopheles crucians* and *quadrimacul*
mingle in varying proportions. Here it was possible to m
accurate comparison of the relative tendency of the two
enter buildings frequented by man. In each case the
depended largely upon the relative abundance of the
species, but the evidence was so consistent throughout
be no doubt as to the general conclusion. The number
found in dwellings as compared with the number found el
underneath houses, in privies and other outbuildings)
small, while with *quadrimaculatus* the situation was revers
ever, in privies *crucians* was almost as numerous, on the
was *quadrimaculatus*.

The finding of *crucians* in such large numbers underneat
suggested (as similar observations on *punctipennis* have
with respect to that species, Carter, Le Prince and Grif
that they might have the habit of entering the dwellings
night and flying out again in the morning. To test th
traps were installed in a dwelling located in a region heav
with *crucians*. Less than half a dozen specimens were ta
weeks' time, making it very probable that no considerable
the house took place.

These observations would tend to give *crucians* a relati
portant place in malaria transmission when compared w
maculatus. On the other hand, certain localities have be

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For this reason an attempt was made to secure exact data on the relative number of infected specimens of *crucians* and *quadrimaculatus* present under natural conditions in a given region (Polk County, Fla.)[2]. Both species were collected and examined in as large numbers as practicable. They were taken from several localities, mostly in or near Mulberry, Fla., and in the rural districts within 10 miles of Lakeland, Fla. Altogether, 1,757 specimens were examined, but many of these were from localities in which no infection was found. Leaving the latter out of account the results are as follows:[3]

	Number examined.	Infected.	Not infected.	Per cent infected.
Anopheles crucians	379	2	377	1.183
Anopheles quadrimaculatus	423	4	419	1.105

Considering the small number of infected specimens and the large mathematical probable error resulting therefrom, the ratio given can be no more than an approximation, but it indicates a probability that the percentage of infected specimens was approximately the same in both species.

It may be of interest to note, in the case of the infected specimens mentioned above, that the amount of infection in the individual mosquito was greater in *quadrimaculatus* than in *crucians*. Neither of the two specimens of *crucians* showed more than a dozen oocysts on the stomach wall, whereas three of the four infected *quadrimaculatus* possessed at least four times that many, one of them exhibiting more than 200 oocysts.

[1] Reports of physicians and patients.

[2] So far as known *A. punctipennis* does not occur in this region.

[3] The criterion used in determining infection in these cases was the presence of oocysts on the stomach wall. The salivary glands were also examined in the cases that revealed oocysts on the stomach. In all but one of them, however, the glands appeared to be free from sporozoites. The exception was a specimen of *quadrimaculatus*.

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Conclusions.

It is believed that the data given above leave no doubt susceptibility of *Anopheles crucians* to infection with mal modia under natural conditions. Likewise, they indic although the habits of this species are probably less con natural infection than are those of *quadrimaculatus*, neve considerable amount of infection occurs. This evidence of susceptibility of infection in nature, taken in conjunction demonstration of its infectivity; i. e., its rôle as a vect laboratory conditions (Mitzmain, 1916 (a), King, 1916), w cate that this species is potentially of definite sanitary im The evidence is too meager, however, to indicate the deg portance it merits as compared with *quadrimaculatus* and *pun*

Considering its habits, it seems probable that *crucians* is an out-of-door biter; i. e., it is probably most effective on po in outhouses. If such proves to be the case, especial pr against out-of-door exposure in the evening will be necessary i infested districts, whereas screening of dwellings will be unimportant except where other species must also be consi

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Although the reports are incomplete, and in many instances more or less indefinite as to dates and extent of epidemic prevalence, they still have a definite interest and significance in showing that as early as June and July, 1918, influenza was epidemic in Great Britain, parts of Continental Europe, India, China, Africa, and Brazil; that by September, when the epidemic first attracted attention in the United States, it already had a wide prevalence in many other countries; and that to date its extension has been virtually world wide.

Summary of the First Reports of the Pandemic of Influenza in Different Parts of the World.

JUNE.

Switzerland: June 1.—Reported as present in Zurich.
England: June 15.—Outbreak in Birmingham. Reported present in other localities.
India: June 22.—Epidemic in Bombay.
Brazil: June 16.—Epidemic in Santos.

JULY.

Netherlands: Reported as seriously prevalent.
Norway: July 13.—Reported as present in Christiania.
Sweden: July 13.—Few cases reported in Malmo.
July 27.—Reported as epidemic in Gothenburg.
Switzerland: Reported as epidemic throughout the country.
China: July 27.—Epidemic in Chungking, about one-half of the population being affected.
India: Reported as present in Madras and Calcutta, and spreading throughout India.
Algeria: Reported as prevalent during the summer.

AUGUST.

Greece: Aug. 18.—Reported as epidemic in Saloniki and in Kalamata.
Sweden: Aug. 10.—Outbreak in Stockholm.
Switzerland: Aug. 1.—Seriously prevalent in St. Gall.

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Spain: Aug. 13.—Epidemic in city and district of Tarragona and in Huelva.
United States: Aug. 28.—Outbreak began in Boston.
West Indies: Aug. 3.—Reported as epidemic in Guadeloupe.

SEPTEMBER.

Denmark: Entire country affected during the month of September.
France: Epidemic reported in Brest, Bordeaux, Havre, Paris, Marseille, and Nartes.
Norway: Epidemic reported in Trondhjem.
Italy: Sept. 27.—Seriously prevalent in Palermo and in Florence.
Spain: Sept. 28.—Epidemic reported as general throughout Spain.
Portugal: Sept. 30.—Seriously prevalent in Lisbon.
Korea: Epidemic reported in Chemulpo, Fusan, and Seoul.
China: Sept. 28.—Widely prevalent in Hankow.
Tunis: Reported as epidemic in Tunis.
South African Union: Sept. 14.—First cases reported in Durban.
Sept. 18.—Epidemic in Rand area.
Sept. 23.—Reported in Cape Town and Kimberley.
Sierra Leone: Sept. 23.—Epidemic in Freetown.
Senegal: Sept. 23.—Epidemic in Dakar.
Morocco: Sept. 28.—Reported as present in epidemic form in Tangier.
Canada: Sept. 30.—Epidemic in Hamilton.
Sept. 28.—Epidemic in Quebec.
Sept. 21.—Epidemic in Victoriaville.
United States: Prevalent along the Atlantic seaboard and the Gulf of Mexico, and spreading rapidly westward, its presence being reported in 43 States and the District of Columbia.
Mexico: Epidemic reported in Santa Cruz.
Salvador: Sept. 11.—Reported as epidemic in Republic of Salvador.
Honduras: Sept. 16.—Epidemic in Amapala.
Brazil: Reported as epidemic in Bahia.
Bermuda: Sept. 25.—Epidemic reported in Bermuda.
Jamaica: Sept. 30.—Outbreak in Lucea and Montego Bay.

OCTOBER.

France: Seriously prevalent in Lyon.
Oct. 1.—Epidemic reported in St. Etienne.
Russia: Oct. 1.—Present in epidemic form in Archangel City.
Italy: Oct. 6.—Epidemic present among troops in Leghorn and in Messina.
Greece: Oct. 25.—Epidemic in Patras.
China: First week in October, epidemic reported in Chang-sha.
Liberia: Oct. 5.—Quarantine placed against vessels from any port in Africa.
Mexico: Oct. 5-21.—Present in epidemic form in Agujita, Chihuahua, Piedras Negras, Sabinas, Matamoros, and spreading rapidly throughout the country.
Canada: Oct. 5-18.—Epidemic reported in Nova Scotia, Province of Ontario, New Brunswick, and Newfoundland.
United States: Epidemic spread practically over the entire United States except into the more isolated rural and mountain areas. About October 15, the crest of the epidemic had been reached in cities along the Atlantic seaboard and in some interior cities, and by the end of the month the crest had been passed in nearly all the larger cities. In rural sections of the central and western sections the epidemic had not reached its height by November 1.
Honduras: Oct. 7.—Epidemic present in Tegucigalpa.
Oct. 30.—Epidemic reported in Belize and the surrounding country.
Guatemala: Oct. 11.—Epidemic reported in Guatemala city.
Costa Rica: Oct. 12.—Prevalent in Limon.
Uruguay: First week in October, widespread outbreak in Montevideo.
Brazil: Oct. 8.—Epidemic reported in Lorenzo Marquez.
Oct. 20.—Seriously prevalent in Para and epidemic in Sao Paulo.

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zuela: Oct. 25.—Epidemic in La Guaira, Maracaibo, and Puerto Cabello, and eading rapidly.
ıbia: Oct. 26.—Epidemic reported in Bogota, Barranquilla, Cartagena, and Peru.
: Oct. 9.—Seriously prevalent in Camaguey and Nuevitas.
Oct. 15.—Epidemic in Republic of Cuba and seriously prevalent in Nueva Gerona.
Oct. 29.—Quarantine placed on all ports.
Oct. 21.—Seriously prevalent in Regla.
ca: Oct. 12.—Epidemic reported in Port Antonio.
Oct. 23.—Epidemic reported in Kingston.
Rico: Oct. 23.—Widely prevalent. Quarantine placed on all ports.
ɜ: Oct. 22.—Epidemic reported in Azores.
ılia: Oct. 17.—Quarantine placed on all ports.
ıi: Few cases reported in Honolulu.
y Islands: Oct. 18.—Reported in epidemic form.
Oct. 23.—Epidemic reported in Grand Canary, Las Palmas, and Teneriffe.
ealand: Oct. 19.—Severe epidemic reported in Auckland and generally diffused ughout dominion.
ascar: Oct. 19.—Outbreak in Madagascar.

NOVEMBER.

ıd: Severely prevalent in Nottingham.
: Outbreak in Aden.
Seriously prevalent throughout country.
Nov. 2.—Epidemic in mild form in Canton.
States: Epidemic reached and passed its peak in the more isolated rural and ıtain sections.
ras: Present in epidemic form in San Pedro.
Guiana: Outbreak in Paramaribo.
a: Nov. 2.—Spreading throughout island.
Nov. 22.—Epidemic reported in Apia.

DECEMBER.

ay: Prevalent in Paraguay and Asuncion.
ıdies: Present in light form in Trinidad.
: Present in mild form in Island of Oahu.
ands: Seriously prevalent.
'slands: Dec. 3.—Seriously prevalent.
Islands: Dec. 8.—Epidemic reported on Island Tahiti in every district.
Dec. 21.—Seriously prevalent on Islands Mururoa, Makatea, Raiatea, and Bora Bora.
can Republic: Dec. 19.—Seriously prevalent in La Plata, Puerto Plata, and Domingo.

JANUARY.

Epidemic reported in Amoy.
can Republic: Jan. 2.—Prevalent throughout Province.
Epidemic present in Campinas and Ribeirao Preto.
ia: Jan. 25.—Epidemic present in Melbourne. This is the first definite report epidemic prevalence in Australia.

uch more definite picture of the chronology and severity of the ıic in limited areas is given in Tables I and II, which show the death rates from all causes in certain cities of Great Britain continental Europe and India, by weeks, from June 2, 1918, to 5, 1919, or to the last week for which statistics are available.

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FIG. 1.—Effect of influenza upon mortality in 96 great towns of England and Wales: Annual death rate by weeks, June 2, 1918, to February 22, 1919, and for the corresponding period in 1917–18, and annual death

tistical Bulletin of the City of Paris (2).[1] From th
istics of mortality from all causes are available by w
le of the years 1917 and 1918 and such part of 1919 as
ne tables. The records for the full years 1917 and 191

[1] Numbers refer to reports cited. See page 1376.

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piled for purposes of study, but in the tables here presented istics are given only for the period since June 2, 1918, because it nly during this period that the gross mortality rates show the nct and unmistakable influence of the influenza epidemic. Com- tive statistics for corresponding weeks of 1917–18 are included ie tabulation only for the 96 Great Towns of England and Wales.

E I.—*Annual death rates per 1,000 from all causes in 96 great towns of England and les, in London and in certain other large cities of Great Britain, by weeks, from ie 2, 1918, to Apr. 5, 1919, with death rates for corresponding weeks of 1917–18 in reat towns.*

96 great towns. Population, 16,577,344.		Liverpool. Population, 716,140.	Glasgow. Population, 1,118,700.	Dublin. Population, 405,000.	London. Population, 4,026,901.	Sheffield. Population, 469,292.	Leeds. Population, 417,051.	Edinburgh. Population, 338,500.	Bristol. Population, 334,873.	Belfast. Population, 401,000.	Bradford. Population, 266,338.	Birmingham. Population, 870,211.	Manchester. Population, 660,143.	New Castle on Tyne. Population, 266,551.
1917	1918													
12.7	11.5	15.0	12.5	17.3	11.2	11.2	14.8	10.8	10.0	14.1	11.4	9.0	11.5	11.5
12.8	11.4	15.1	11.2	17.0	11.0	12.1	11.5	9.9	8.9	17.1	14.5	10.4	11.1	10.6
12.4	11.7	15.7	12.2	16.9	12.0	12.0	13.4	11.3	11.2	25.3	13.1	11.3	11.5	12.5
11.7	13.2	15.2	11.7	15.7	13.2	16.9	17.8	12.2	8.4	45.2	15.3	11.0	13.4	13.7
11.2	19.0	20.2	13.8	23.4	17.3	27.9	21.5	12.8	12.6	44.4	17.2	19.8	23.1	25.4
11.7	21.1	21.3	12.2	32.7	18.4	24.3	23.0	15.0	12.9	28.3	21.9	23.2	28.8	29.7
11.2	18.0	21.0	15.9	27.2	15.2	21.2	17.8	16.6	15.7	20.2	21.9	15.1	23.9	22.3
11.2	12.1	18.4	14.9	20.0	11.8	12.3	10.6	11.1	13.2	17.4	18.4	10.0	13.9	13.3
10.3	12.1	14.1	13.1	15.9	11.4	13.2	15.4	12.4	13.4	15.0	13.9	9.0	11.8	11.5
10.4	10.4	12.5	12.4	15.3	10.5	9.9	8.0	10.5	8.3	13.5	11.9	8.3	9.4	11.3
10.5	10.4	14.7	10.9	17.6	9.8	9.3	13.0	8.0	12.9	15.7	13.3	8.7	9.5	10.8
10.6	10.8	14.8	11.0	18.6	9.6	12.4	12.6	8.3	10.1	13.8	10.6	9.4	10.5	13.7
10.6	11.2	14.8	9.2	17.0	10.5	10.8	12.5	9.2	10.6	12.7	12.9	10.7	9.6	14.9
11.1	11.9	17.1	11.7	17.8	11.3	12.7	13.8	9.9	10.3	11.3	11.7	11.9	11.1	12.3
10.6	11.3	13.3	11.0	19.1	10.5	13.9	12.9	10.8	11.7	14.5	12.9	9.7	9.6	12.5
11.1	11.7	16.0	12.8	16.9	11.8	12.0	12.6	11.7	10.6	14.5	13.7	9.2	10.4	9.2
10.8	11.4	17.2	18.6	20.0	12.2	12.2	13.8	11.9	9.3	10.2	9.0	8.8	10.2	13.7
11.1	12.6	18.9	26.2	21.3	12.7	10.6	13.3	13.8	11.8	9.6	9.2	8.8	11.6	12.5
11.8	15.1	29.0	35.9	24.6	13.9	15.3	17.3	11.6	14.5	14.1	15.9	9.6	10.8	13.5
12.0	20.7	46.2	38.4	38.6	20.1	24.9	18.5	18.0	17.0	11.0	12.1	11.2	11.5	12.3
12.0	30.9	44.5	34.3	47.3	34.5	46.1	33.0	19.3	24.9	13.8	12.1	12.9	14.8	14.3
12.6	43.6	37.4	26.7	66.5	56.5	63.3	49.5	36.4	49.7	17.5	20.6	19.4	19.7	19.4
11.8	43.8	29.2	19.2	60.0	55.5	75.9	57.1	46.2	50.3	34.0	29.0	24.8	27.0	31.3
12.2	38.7	23.2	18.9	45.6	44.0	51.9	52.5	36.6	42.4	54.7	43.7	29.4	36.3	33.1
12.3	36.3	23.7	23.5	31.9	36.8	38.2	41.1	32.5	32.5	65.0	48.6	35.8	45.3	36.2
11.9	36.5	24.2	21.8	26.0	32.8	37.9	33.4	32.2	30.1	61.4	47.2	44.3	54.2	42.4
12.4	28.6	25.7	17.6	22.5	26.0	28.7	24.9	20.5	24.6	41.7	33.1	35.1	40.2	31.9
13.6	20.2	22.0	15.1	22.0	18.2	16.6	18.5	16.1	22.0	24.7	20.0	25.1	22.6	23.1
15.3	16.8	22.1	14.0	18.9	14.4	16.4	15.1	12.7	16.7	19.2	16.1	16.7	19.1	17.0
17.9	14.8	22.2	16.6	20.4	13.3	16.3	15.9	14.7	13.1	19.4	13.9	11.3	16.2	13.9
18.1	16.1	27.0	15.1	23.4	16.6	15.7	18.9	17.8	16.8	17.3	14.1	13.4	15.2	16.4
19.6	16.0	27.3	18.6	21.2	15.8	14.8	19.4	19.1	15.7	20.4	12.9	14.3	16.5	15.8
18.7	15.5	26.0	14.9	22.1	14.8	14.1	18.6	21.1	13.7	15.7	18.0	13.3	16.9	16.2
17.1	15.0	24.6	16.4	23.0	14.1	13.7	19.6	21.4	12.8	18.9	14.3	12.1	14.9	16.8
15.0	17.2	25.7	16.9	23.6	16.9	14.2	21.1	21.4	14.2	16.4	16.1	13.7	17.2	20.9
15.7	21.0	33.7	20.9	25.0	20.2	19.9	18.5	42.5	17.0	21.8	26.0	16.8	21.1	33.5
14.8	27.8	41.3	31.6	33.3	27.2	21.8	27.4	51.6	23.7	22.8	40.3	20.3	25.7	61.0
16.7	35.7	44.7	42.2	45.2	34.2	29.9	43.3	52.1	36.1	28.3	60.5	29.6	34.0	66.1
18.4	35.7	43.4	48.3	60.0	32.4	29.8	41.9	41.2	31.1	30.9	53.3	38.4	40.6	44.2
17.4	31.9	38.2	42.9	63.0	26.6	28.9	40.3	27.9	35.8	30.3	52.9	28.7	41.0	30.7
18.5	26.4	28.8	32.7	47.8	21.4	28.6	33.4	23.6	32.2	33.9	32.3	30.5	30.1	20.7
16.5	20.9	22.3	25.5	37.1	18.0	22.8	23.3	18.3	22.9	30.9	19.6	26.5	24.4	18.0
17.7	19.3	20.0	22.8	31.5	17.6	22.6	17.9	15.3	19.9	26.9	24.7	23.4	24.2	18.2
17.3	17.9	20.0	19.5	32.6	17.1	21.9	17.1	16.7	18.8	21.8	18.8	19.4	19.9	16.6

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TABLE II.—*Annual death rates per 1,000 from all causes in continental European and Indian cities, by weeks, from June 2, 1918, to Mar. 29, 1919.*

Week ended (1918-19)—	Bombay. Population, 979,445.	Madras. Population, 519,660.	Trieste. Population, 182,740.	Budapest. Population, 1,031,256.	Vienna. Population, 2,312,274.	Gothenburg. Population, 196,943.	Berlin. Population, 1,705,215.	Hamburg. Population, 1,050,300.	Paris. Population, 2,847,229.	Stockholm. Population, 413,162.	Copenhagen. Population 559,000.	Amsterdam. Population, 541,073.	[illegible]
June 8	37.2	39.1	26.6	24.3	17.9	7.6	16.6	18.8	11.1	10.1	12.7	11.3	[illegible]
15	33.2	36.2	31.0	.....	20.8	12.7	16.4	23.6	11.0	13.3	11.1	11.5	[illegible]
22	37.2	40.0	22.8	.....	18.2	9.7	15.9	21.6	11.5	10.8	9.9	10.4	[illegible]
29	54.6	40.7	26.6	.....	19.0	9.5	19.4	20.9	11.2	10.9	9.9	10.9	[illegible]
July 6	77.8	41.7	.....	26.1	19.3	13.0	20.9	21.1	11.5	13.3	10.9	9.7	[illegible]
13	63.0	48.3	20.1	24.0	22.7	9.7	16.4	23.3	13.0	8.1	9.2	10.6	[illegible]
20	40.6	62.9	.....	.....	.....	11.1	18.3	22.5	11.5	9.7	10.9	11.7	[illegible]
27	34.2	63.6	.....	19.2	.....	13.2	20.9	23.5	10.4	10.6	12.5	7.5	[illegible]
Aug. 3	33.2	54.6	28.3	.....	.....	10.8	20.1	16.4	10.7	11.3	13.9	14.1	[illegible]
10	33.8	.....	26.6	20.9	15.6	12.1	22.5	16.6	9.7	18.4	14.7	17.2	[illegible]
17	.....	.....	31.7	22.1	16.7	10.0	.....	.....	10.7	12.6	11.2	17.0	[illegible]
24	31.1	.....	28.9	19.2	.....	11.9	23.2	16.6	10.6	12.1	9.7	13.5	[illegible]
31	.....	38.0	23.8	20.8	.....	12.7	.....	.....	12.1	11.5	8.2	...	[illegible]
Sept. 7	36.4	41.0	30.3	18.8	15.7	.....	21.3	18.4	11.9	.....	6.5	9.9	[illegible]
14	51.0	42.3	35.7	23.7	17.4	.....	21.9	20.4	12.9	10.6	8.2	10.3	[illegible]
21	100.0	45.9	45.2	23.6	19.6	.....	21.7	18.6	13.7	.....	.....	10.3	[illegible]
28	169.1	65.2	45.3	28.8	22.1	15.6	20.5	20.2	15.9	.....	.....	11.4	[illegible]
Oct. 5	257.2	97.5	52.8	36.4	28.3	24.4	21.3	23.8	17.9	16.7	11.5	..	[illegible]
12	220.4	170.3	103.8	45.8	39.4	42.5	29.2	33.4	26.0	33.5	.....	.....	[illegible]
19	114.2	202.1	136.5	58.4	58.6	67.9	.....	.....	34.9	36.7	19.4	26.0	[illegible]
26	72.1	176.7	.....	57.4	48.4	42.2	41.7	47.7	44.1	40.5	35.4	29.2	[illegible]
Nov. 2	54.0	113.3	.....	39.4	29.3	28.5	37.5	37.3	43.2	33.2	44.5	32.7	[illegible]
9	43.3	119.5	.....	46.0	22.2	24.5	22.0	26.5	29.4	26.4	37.1	42.0	[illegible]
16	40.9	81.0	.....	36.5	24.0	23.8	21.7	28.3	21.0	23.2	23.4	31.6	[illegible]
23	40.1	79.9	.....	43.4	27.6	16.9	21.1	22.9	17.9	22.1	16.9	21.4	[illegible]
30	33.1	56.6	.....	46.4	27.3	16.1	22.7	22.7	19.4	20.1	15.0	20.9	[illegible]
Dec. 7	36.2	58.2	.....	49.1	28.0	19.8	23.7	25.7	20.6	20.9	14.5	21.1	[illegible]
14	55.0	60.5	.....	34.3	24.4	15.1	23.5	23.6	19.7	19.5	15.2	16.1	[illegible]
21	86.5	66.6	.....	32.4	20.7	17.7	14.7	.....	15.9	20.1	21.6	15.2	[illegible]
28	85.0	71.1	.....	40.5	19.4	18.7	9.7	.....	17.0	20.4	13.5	16.1	[illegible]
Jan. 4	101.0	78.4	.....	.....	20.1	14.5	22.3	21.2	17.8	23.0	17.5	14.9	[illegible]
11	81.0	97.9	.....	.....	19.0	15.6	14.6	21.9	18.8	20.1	24.9	14.5	[illegible]
18	76.5	88.8	.....	.....	17.5	12.7	20.9	22.4	18.5	15.6	23.2	14.6	[illegible]
25	180.6	88.7	39.2	.....	.....	18.4	19.6	21.8	18.0	14.4	20.3	14.3	[illegible]
Feb. 1	237.8	74.2	38.2	.....	.....	14.7	.....	.....	18.1	15.6	17.0	14.7	[illegible]
8	160.2	67.2	31.1	.....	.....	13.7	.....	.....	21.8	12.2	17.5	18.9	[illegible]
15	92.1	58.1	.....	.....	.....	14.7	.....	.....	26.2	13.6	17.0	21.1	[illegible]
22	.....	.....	.....	.....	.....	18.1	.....	.....	34.1	14.2	16.8	34.0	.
Mar. 1	.....	.....	30.3	.....	.....	.....	.....	.....	30.3	14.5	17.4	16.7	[illegible]
8	.....	.....	25.6	.....	.....	.....	.....	.....	23.9	18.6	18.7	19.4	[illegible]
15	.....	.....	.....	.....	.....	.....	.....	.....	20.4	.....	20.2	15.3	
22	.....	.....	.....	.....	.....	.....	.....	.....	17.9	.....	16.9	.	
29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.

Considering first the 96 Great Towns of England and Wales, comprising London and 95 other cities of over 50,000 population in 1911, it is evident from Table I and Figure 1 that since June 1, 1918, there have been three periods of sharply increased general mortality, namely.

First, from the week ending June 29, to the week ending July 27, inclusive, the highest mortality, corresponding to an annual rate of 21.1 per 1,000, being reached in the week ending July 13.

Second, from the week ending October 5, to that ending December 21, the highest mortality, an annual rate of 43.8 per 1,000, occurring in the week ending November 9.

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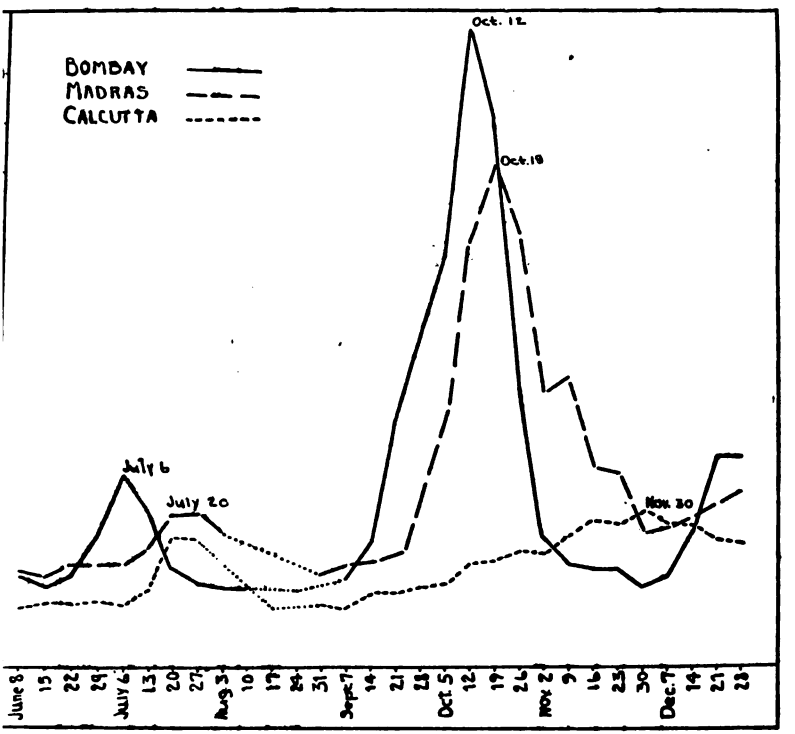
hird, from the week ending February 8 to that ending March 22, peak of mortality in this period, an annual rate of 35.7 per 1,000, ıg in the weeks ending February 22 and March 1.

hese three waves of high mortality are, in turn, manifest in each he thirteen large cities [1] for which statistics are given separately he tabulation, though showing considerable variations in date, ıtion, and height. The variations in individual cities are illus-ɔd in Figure 2, showing weekly mortality curves for Liverpool, don, and Manchester.



Effect of influenza epidemic upon mortality in Bombay, Madras, and Calcutta, India: Annua eath rates per 1,000 of population from all causes, by weeks, June 2 to December 28, 1918.

inarily, gross weekly death rates would not justify any con-ı as to the influence of a particular cause of death, especially the population and environment have been materially altered ɔ abnormal conditions of war. In this instance, however, the ɜe in mortality rates is so very great, so general, and so nearly ·onous in the different cities, as to clearly indicate the opera-f a single wide-spread cause, undoubtedly epidemic influenza. ɜrtainty that epidemic influenza was the major factor in these ıed death rates is established by the more detailed analyses ted later.

[1] he exception of Glasgow, Edinburgh, Dublin, and Belfast, these cities are all included in the 6 Great Towns.

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The death rates of Continental European and Indian cities as presented in Table II are of less clear and less definite significance since, in some of these cities, the death rates throughout 1917 and

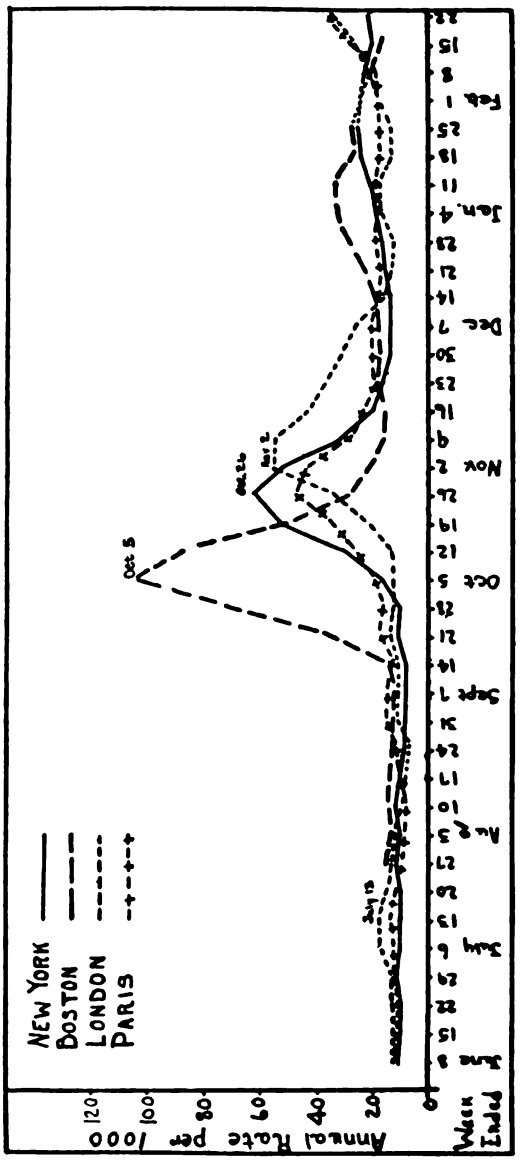

FIG. 4.—Effect of influenza epidemic upon mortality in New York City, Boston, London, and Paris: Annual death rates per 1,000 of population from all causes, by weeks, June 2, 1918, to February 22, 1919.

The graphs for New York City are plotted from data given in the Weekly Bulletin of the New York City Department of Health; those for Boston from the Weekly Health Index of the Bureau of the Census.

the first half of 1918 had been abnormally high or irregular, and since moreover, the statistics for the period embraced in the table are incomplete in places. Nevertheless, increased death rates which may safely be attributed to the influenza epidemic are noted during Jan-

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maximum mortality rates in the remainder of the cities are within the range of rates observed in the British cities.

The third wave of high mortality noted in British cities is shown, likewise, in the Indian cities, Bombay, Madras, and Calcutta, notably in Bombay. Among the Continental cities, Paris shows a distinct and considerable rise in February and March, which is less clearly evident in the other cities for which the statistics are fairly complete.

Figure 4, showing the annual mortality rates from all causes, by weeks, in Boston, New York City, London, and Paris, affords a convenient comparison of the course of the epidemic in these four cities, with reference to chronology and the extent of influence upon general mortality.

A more comprehensive comparison of relative chronology of the epidemic in American, British, Continental European, and Indian cities is presented in the following summary showing, for each of the cities listed, the week in which the highest mortality rate occurred between October 1 and November 30, which comprises the period of maximum epidemic mortality in all these cities.

Weeks in which the highest mortality occurred during the influenza epidemic of 1918–19 in cities of the United States, Great Britain, Continental Europe, and India.

Week ended (1918)—	United States.	Great Britain.	Continental Europe.	India.
Oct. 5	Boston			Bombay.
	Cambridge			
Oct. 12	Fall River			
	Lowell			
	Worcester			
Oct. 19	Providence	Glasgow	Gothenburg	Madras.
	Syracuse	Liverpool	Vienna	
	Philadelphia		Budapest	
	Baltimore		Trieste	
	Washington			
	Richmond			
	Indianapolis			
	Memphis			
	Nashville			
	Omaha			

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Weeks in which the highest mortality occurred during the influenza epidemic of 1918-19 in cities of the United States, Great Britain, Continental Europe, and India—Con.

Week ended (1918)—	United States.	Great Britain.	Continental Europe.	India.
Oct. 26	Albany		Stockholm	
	Rochester		Hamburg	
	Buffalo		Berlin	
	New Haven		Paris	
	New York			
	Newark			
	Jersey City			
	Atlanta			
	Birmingham			
	Louisville			
	New Orleans			
	Chicago			
	Cincinnati			
	Columbus			
	Toledo			
	Dayton			
	Milwaukee			
	Minneapolis			
	Denver			
	Seattle			
Nov. 2	Cleveland	London	Christiania	
	St. Louis	Sheffield	Copenhagen	
	Kansas City	Dublin	Amsterdam	
	San Francisco			
	Los Angeles			
	Oakland			
	Portland			
Nov. 9	Pittsburgh	Edinburgh		
	Spokane	Leeds		
Nov. 16	St. Paul			
	Grand Rapids			
Nov. 23		Bradford		
		Belfast		
Nov. 30		Newcastle		Calcutta.
		Manchester		
		Birmingham		

The most striking fact in this summary is that this phase of the epidemic reached its maximum intensity simultaneously in Boston and in Bombay. The peak of mortality in the majority of American cities, outside of Massachusetts and of Continental European cities, fell during the two weeks ended October 26, while a majority of the British cities reached their maximum rates in the weeks ended November 2 to 30, inclusive.

Tables III and IV show, respectively, the number of deaths and the annual death rates from influenza, by weeks from October 12, 1918, to April 5, 1919, in certain British cities, including a majority of those comprised in Table I. These statistics, which are abstracted from the Weekly Reports of the Registrar General for England and Wales, are available only from the week ending October 19 (2).[1] Reference to these tables shows that the excessively high mortality rates from all causes during October, November, and subsequent months correspond to excessive death rates from influenza, which, however, represent only a portion of the excess mortality attributable to the epidemic, part of the deaths having been returned, as in the United

[1] Numbers refer to reports cited. See page 1376.

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,tes, under the diagnosis of pneumonia or other acute respiratory ;ctions.

LE No. III.—*Number of deaths from influenza in Great Britain—96 great towns of ngland and Wales, London and certain other cities of over 250,000 inhabitants—by :eks, from Oct. 13, 1918, to Apr. 5, 1919.*

Cities.	Week ended—										
	October.		November.					December.			
	19	26	2	9	16	23	30	7	14	21	28
it towns	1,895	4,482	7,412	[1]7,560	5,916	5,106	5,119	3,574	1,885	1,014	581
on	371	1,256	[1]2,458	[1]2,433	1,665	1,178	942	660	322	186	95
l	24	63	190	[1]186	144	105	73	57	37	32	18
n.ham	8	51	98	187	246	280	[1]388	276	164	68	25
ool	[1]215	230	170	118	86	55	66	68	51	43	44
ester	12	32	83	162	235	311	[1]374	254	111	55	39
ord	2	10	30	73	122	[1]121	129	69	29	13	8
	39	101	194	[1]247	203	163	110	57	31	13	14
ld	69	233	[1]468	402	241	164	166	97	39	22	18
stle on Tyne	12	7	32	81	73	101	[1]99	68	40	15	15
	103	162	[1]250	204	141	67	49	42	24	14	9

Cities.	Week ended—													
	January.				February.				March.					April
	4	11	18	25	1	8	15	22	1	8	15	22	29	5.
towns	441	380	274	222	272	604	1,363	3,046	3,889	3,218	2,320	1,361	888	569
l	65	68	43	33	58	100	273	653	608	597	435	230	125	41
gham	19	14	5	10	4	3	13	39	70	76	63	37	21	10
ol	19	19	8	4	8	10	29	84	159	134	157	107	94	56
ster	66	56	33	40	29	55	19	188	196	149	93	59	19	30
d	14	16	18	6	9	28	44	130	196	210	117	74	54	34
	6	2	6	4	5	37	50	142	129	108	47	14	23	7
l	14	14	2	15	9	14	29	82	130	96	71	45	23	11
stle on	9	5	12	6	8	13	18	53	64	83	57	36	27	27
	7	6	3	3	11	42	119	163	94	58	33	22	15	4
	10	6	10	6	3	4	21	88	153	148	104	77	34	41

[1] Indicates week of highest mortality rate from all causes (see Table I).

No. IV.—*Annual death rates per 1,000 from influenza in Great Britain—96 towns of England and Wales, London and certain other cities of over 250,000 bitants—by weeks, from Oct. 13, 1918, to Apr. 5, 1919.*

Cities.	Week ended—										
	October.		November.					December.			
	19	26	2	9	16	23	30	7	14	21	28
towns	6.0	14.1	23.3	[1]23.8	18.6	16.1	16.1	11.2	5.9	3.2	1.8
	4.8	16.3	[1]31.8	[1]31.5	21.5	15.2	12.2	8.5	4.2	2.4	1.3
	3.7	9.8	29.6	[1]28.9	22.4	16.4	11.4	8.9	5.8	5.0	2.8
ham	.5	3.1	5.9	11.2	14.7	16.8	[1]23.2	16.5	9.8	4.1	1.5
l	[1]15.6	16.7	12.4	8.6	6.2	4.0	4.8	4.9	3.7	3.1	3.2
ter	.9	2.5	6.6	12.8	18.6	24.6	[1]29.5	20.1	8.8	4.3	3.1
	.4	2.0	5.9	14.3	23.9	[1]23.7	23.5	13.5	5.7	2.5	1.6
	4.9	12.6	24.2	[1]30.9	26.0	20.4	13.8	7.1	3.9	1.6	1.8
	7.7	25.9	[1]51.9	44.6	26.8	18.2	18.5	10.8	4.3	2.4	2.0
e on Tyne	2.3	1.4	6.3	15.8	14.3	19.7	[1]19.4	13.3	7.8	2.9	2.9
	13.3	20.8	[1]32.2	26.2	18.1	8.6	6.3	5.4	3.1	1.8	1.2

[1] Indicates week of highest mortality rate from all causes (see Table I).

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TABLE No. IV.—*Annual death rates per 1,000 from influenza in Great Britain, etc.*—Con.

Cities.	Week ended—													
	January.				February.				March.					Apr.
	4	11	18	25	1	8	15	22	1	8	15	22	29	5
96 great towns	1.4	1.2	0.9	0.7	0.9	1.9	4.3	9.6	*18.2*	10.1	7.3	4.1	2.6	
London	.8	.9	.6	.4	.8	1.3	3.5	8.4	*10.4*	7.7	6.5	3.0	1.6	
Bristol	3.0	2.2	.8	1.6	.6	.5	2.0	6.1	10.9	*11.5*	8.5	5.4	2.1	
Birmingham	1.1	1.1	.5	.2	.5	.6	1.7	5.0	9.5	*18.0*	9.1	6.4	3.4	
Liverpool	4.8	4.1	2.4	2.9	2.1	4.0	1.4	13.7	*14.8*	10.8	6.8	4.3	1.4	
Manchester	1.1	1.3	1.4	.5	.7	2.2	3.5	10.3	15.5	*16.6*	9.2	4.8	1.3	
Bradford	1.2	.4	1.2	.8	1.0	7.2	9.8	*17.8*	25.2	20.7	9.5	2.7	..	
Leeds	1.8	1.8	.3	1.9	1.1	1.8	3.6	10.3	*16.5*	12.0	8.8	5.7	2.9	
Sheffield	1.0	.6	1.3	.7	.9	1.4	2.0	5.9	7.1	9.2	6.3	4..	2.6	
Newcastle on Tyne	1.4	1.2	.6	.6	2.2	8.2	23.3	*31.9*	24.3	15.9	8.5	5.7	3.9	.8
Dublin	1.3	.8	1.3	.8	.4	.5	2.7	11.3	*19.7*	19.0	3.4	0.9	4.4	.7

Table V shows the number of deaths from influenza in Continental European and Indian cities by weeks so far as this information is available, i. e., from the week ended September 7, 1918, or, in some instances, from a later period, to week ended March 15, 1919. This table, compared with Table II, shows also a very definite parallelism between gross death rates and deaths from influenza.

In order to show more specifically the influence of epidemic influenza upon the excess death rates from all causes, Table VI has been compiled, showing for London (1),[1] Paris (2),[1] and Dublin (3) the only foreign cities for which detailed records are as yet available the number of deaths each week from influenza, all forms of pneumonia, acute bronchitis and "other diseases of the respiratory system" for the period June 2, 1918, to February 22, 1919, with parallel records for corresponding weeks in the previous year. One column in this table shows the excess deaths from these causes in the 1918-19 epidemic period as compared with the preceding year. From the table it is evident that the slightly increased mortality in Paris during July was attributable to an increase in deaths from these causes. This is even more clearly evident in respect to London and Dublin during July, and in respect to all three cities during the subsequent epidemic periods.

TABLE V.—*Number of deaths from influenza in Continental European and Indian cities by weeks, from Sept. 7, 1918, to Mar. 15, 1919.*

Cities.	September.				October.				November.				
	7	14	21	28	5	12	19	26	2	9	16	23	30
Bombay	.....	11	109	490	[2]934	964	506	252	137	72	60	42	27
Madras	4	2	.....	25	150	554	[2]899	709	399	271	185	99	48
Trieste	3	2	8	17	17	53	[2]61	.....	.....	.....	.....	.....	.....
Budapest	2	4	10	51	143	286	[2]481	386	358	339	189	107	70
Vienna	.....	.....	9	28	98	421	[2]906	841	300	160	131	97	47
Gothenburg	.....	.....	.....	26	47	95	[2]163	104	67	.....	60	31	9
Paris	12	15	53	94	192	472	880	[1]1,393	1,119	639	389	178	114
Stockholm	.....	.....	.....	.....	53	128	178	[2]221	160	118	.....	71	38
Copenhagen	.....	.....	.....	.....	.....	.....	11	26	[2]15	25	.....	6	4
Amsterdam	.....	.....	.....	.....	.....	.....	101	285	[2]290	193	140	82	38
Christiania	.....	.....	.....	.....	.....	.....	.....	72	(3)	90	.....	48	27
Calcutta	2	.....	2	15	45	121	158	353	326	289	236	60	175

[1] Numbers refer to reports cited. See page 1370.

[2] Indicates week of highest recorded mortality rate from all causes. (See Table II.)

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BLE V.—*Number of deaths from influenza in Continental European and Indian cities by weeks, from Sept. 7, 1918, to Mar. 15, 1919*—Continued.

Cities.	December.				January.				February.				March.		
	7	14	21	28	4	11	18	25	1	8	15	22	1	8	15
ıbay....	21	14	18	21	13	25	12	7	C	4	6	.....	.....	.....	.....
ras.....	32	23	13	15	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
ste.....	.....	.....	.....	.....	.....	.....	.....	2	.....	2	.....	.....	4	3	.....
apest...	386	185	224	200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
na.....	214	151	93	66	42	35	43	.....	.....	.....	.....	.....	.....	.....	.....
enburg	23	17	19	27	16	.....	8	19	10	4	3	14	.....	.....	.....
s.....	236	171	168	142	142	151	89	75	77	91	105	358	421	296	161
kholm..	49	33	53	42	56	44	24	20	17	19	11	22	22	38	.....
nhagen	.....	4	8	4	4	10	5	12	6	.....	3	2	6	4	6
terdam	31	30	23	14	.....	6	8	3	5	5	1	8	5	5	2
stiania	.....	23	22	13	20	9	11	5	3	.....	6	.....	2	26	46
itta....	332	277	216	229	208	222	201	160	106	155	92	.....	.....	.....	.....

LE VI.—*Number of deaths from influenza and other acute respiratory diseases in each ek from June 2, 1918, to Feb. 22, 1919, and in corresponding weeks of 1917–18 in ndon, Dublin, and Paris.*

918–19 ended—	London.			Dublin.			Paris.		
	1917–18	1918–19	Increase or decrease 1918–19.	1917–18	1918–19	Increase or decrease 1918–19.	1917–18	1918–19	Increase or decrease 1918–19.
8.....	121	116	− 5	19	21	+ 2	71	51	− 20
5.....	122	114	− 8	21	21	+ 0	78	53	− 25
2.....	87	131	+ 44	14	30	+ 16	77	60	− 17
9.....	78	202	+ 124	13	28	+ 15	46	85	+ 39
6.....	98	426	+ 328	20	72	+ 52	40	83	+ 43
3.....	119	571	+ 452	24	153	+129	53	135	+ 82
0.....	109	379	+ 270	18	100	+ 82	65	87	+ 22
7.....	91	227	+ 136	21	66	+ 45	57	58	+ 1
3.....	83	125	+ 42	18	24	+ 6	53	65	+ 12
).....	79	96	+ 17	15	23	+ 8	47	51	+ 4
7.....	64	93	+ 29	10	24	+ 14	36	75	+ 39
4.....	81	71	− 10	16	19	+ 3	40	75	+ 35
1.....	70	86	+ 16	14	15	+ 1	38	93	+ 55
7.....	91	86	− 5	18	25	+ 7	39	81	+ 42
4.....	66	87	+ 21	15	18	+ 3	40	114	+ 74
.....	77	90	+ 13	14	19	+ 5	44	167	+ 123
3.....	94	122	+ 28	15	38	+ 23	44	252	+ 208
3.....	103	158	+ 55	15	50	+ 35	51	372	+ 321
1.....	99	278	+ 179	16	71	+ 55	42	718	+ 676
).....	174	675	+ 501	24	196	+172	62	1,171	+1,112
.....	182	1,689	+1,507	13	270	+257	68	1,741	+1,673
.....	189	3,178	+2,989	25	418	+393	109	1,499	+1,390
.....	178	3,228	+3,050	24	360	+336	100	874	+ 774
.....	194	2,378	+2,184	27	241	+214	101	476	+ 375
.....	212	1,789	+1,577	31	147	+116	95	326	+ 231
.....	187	1,451	+1,264	20	107	+ 87	86	371	+ 285
.....	220	1,070	+ 850	38	83	+ 45	72	443	+ 371
.....	219	612	+ 393	44	70	+ 26	88	342	+ 254
.....	343	342	− 1	27	48	+ 21	101	335	+ 234
.....	564	311	− 253	38	51	+ 13	177	286	+ 109
.....	566	321	− 245	39	64	+ 25	214	290	+ 83
.....	554	326	− 228	46	55	+ 9	261	322	+ 61
.....	491	289	− 202	41	48	+ 7	225	253	+ 31
.....	347	280	− 67	38	45	+ 7	185	250	+ 64
.....	276	369	+ 93	41	52	+ 11	163	257	+ 94
.....	287	529	+ 242	25	69	+ 44	120	344	+ 224
.....	252	907	+ 655	27	124	+ 97	112	529	+ 417
.....	290	1,464	+1,174	31	209	+178	113	852	+ 739

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A further analysis of the influence of deaths from influenza, pneumonia, bronchitis, and other respiratory diseases (excepting pulmonary tuberculosis) in contributing to the excess death rates in London, Paris, and Dublin, is shown in Tables VII and VIII, in which also are included statistics for New York City compiled from the Weekly Bulletin of the New York City Department of Health (4).[1] From Table VIII it is seen that excess deaths from influenza are 74.5 per cent, and the excess deaths from pneumonia (all forms) are 50.6 per cent of the excess deaths from all causes in New York, the combined total of excess deaths from influenza and pneumonia thus being approximately 25 per cent greater than the excess deaths from all causes.[2]

The London statistics differ from those of New York in showing a relatively larger percentage of excess deaths returned under the diagnosis of influenza, a much smaller percentage, 7.3 per cent, returned as due to pneumonia, and a considerable proportion, 13.7 per cent, returned as due to bronchitis, the sum of the excess from these causes being approximately equal to the total excess.

The Paris statistics are generally similar in respect to the proportion of deaths from influenza and pneumonia, but have a negligible proportion, 0.2 per cent, attributed to bronchitis and a notably large proportion, 20.1 per cent, attributable to "other diseases of the respiratory system." This difference is readily accounted for by the fact that in the Paris statistics deaths from broncho-pneumonia are included in the group of "other diseases of the respiratory system," whereas in the statistics of New York and British cities these deaths are included under the diagnosis of "pneumonia, all forms."

TABLE VII.—*Number of deaths from all causes and from influenza, pneumonia (all forms), bronchitis, and other respiratory diseases,[1] for the period June 2, 1918, to Feb. 1, 1919, and for the corresponding period in 1917–18, and number of excess deaths from all causes in 1918 over 1917, in New York, London, Paris, and Dublin.*

Cities.	All causes.			Influenza.			Pneumonia all forms.		
	1917	1918	Excess.	1917	1918	Excess.	1917	1918	Excess.
New York	54,871	74,742	20,071	236	15,151	14,915	6,933	17,686	10,753
London	41,531	57,732	16,201	285	12,868	12,583	3,285	4,667	1,382
Paris	28,334	39,102	10,768	37	7,363	7,326	781	1,452	671
Dublin	5,117	8,156	3,039	19	1,622	1,603	346	1,043	697

Cities.	Bronchitis.			Other respiratory diseases.[3]		
	1917	1918	Excess.	1917	1918	Excess.
New York						
London	3,746	5,964	2,218	234	551	317
Paris	129	152	23	2,477	4,646	2,169
Dublin	520	816	296	50	31	-19[4]

[1] Numbers refer to reports cited. See page 1376.

[2] In letting the number of excess deaths be represented by 100 per cent, an algebraic rather than an arithmetical sum is used, and, whereas the excess deaths from influenza and pneumonia (all forms) are represented by plus quantities the excess deaths from certain other diseases are minus quantities. This means that the indicated death rates in these latter diseases are below rather than in actual excess of the rates in the comparative period.

[3] Except pulmonary tuberculosis.

[4] Decrease.

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disease as manifested in the several cities, or only to differences in nomenclature and classification, is uncertain.

While this paper was in process of publication the report of the Influenza Commission of the Union of South Africa was received, from which Tables IX and X have been abstracted.

These figures are of special interest because of the enormous case incidence—42.8 per cent; also because of the notably higher incidence and death rates in the native as compared with the European population.

With reference to this difference the Commission makes the following comment:

"As to the reasons for these variations, the Commission can express no definite opinion. The well-established susceptibility of the native and colored population of South Africa to diseases of the respiratory tract, inhygienic housing and lack of even the most rudimentary knowledge of caring for the sick, and, in many cases, prejudice against medical help and against admission to hospitals, undoubtedly played very important rôles in causing heavy mortality."

TABLE IX.—*Number of cases and number of deaths from influenza in Union of South Africa during the period Aug. 1 to Nov. 30, 1918.*[1]

Province.	Population.			Cases.			Deaths.		
	European (1918).[2]	Other than European (1911).	Total.	European.	Other than European.	Total.	European.	Other than European.	Total.
Cape	617,131	1,932,588	2,599,719	192,007	1,009,223	1,201,230	5,855	81,253	87,108
Transvaal	493,413	1,265,650	1,764,063	140,639	491,448	632,087	3,267	25,397	28,664
Orange Free State	181,613	352,985	534,598	79,532	150,492	230,024	2,242	7,495	9,737
Natal	120,903	1,095,929	1,216,832	42,475	510,989	553,464	362	13,600	13,962
Union	1,418,060	1,697,152	6,115,212	454,653	2,162,152	2,616,805	11,726	127,745	139,471

[1] Report of the Influenza Epidemic Commission, Union of South Africa, 1919. [2] Preliminary figures.

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(1918), and 53 (1919).

(2) Bulletin Hebdomadaire de Statistique Municipale, Ville de Paris. Masson & Cie., Paris, 1917, 1918, 1919.

(3) Weekly Return of Births and Deaths Registered in the Dublin Registration Area and in Eighteen of the Principal Urban Districts of Ireland. By authority of the Registrar General. Alex. Thom & Co. (Ltd.), Dublin. Vols. 54 (1917), 55 (1918), and 56 (1919).

(4) Weekly Bulletin of the Department of Health, City of New York. Vols. VI, VII, and VIII.

(5) Report of the Influenza Epidemic Commission, Union of South Africa. Cape Times (Ltd.), Cape Town, 1919.

CLOSING OF SCHOOLS AND THEATERS DURING INFLUENZA EPIDEMIC.

ARIZONA SUPREME COURT DECIDES THAT LOCAL BOARDS OF HEALTH CAN ORDER SUCH CLOSING.

In a recent Arizona case [1] the supreme court of that State decided that a local board of health can order the schools to be closed during an epidemic to prevent the spread of the disease.

The board of school trustees of the city of Globe sought to enjoin the enforcement of regulations of the city board of health closing the schools during the epidemic of influenza. It was contended that it was beyond the power of the health board to take such action.

The regulations in question declared certain things to be nuisances, among these being holding sessions of schools during the influenza epidemic, and prohibited the same. The court treats very fully of

[1] Globe School Dist. No. 1, of Globe, Gila County, a Board of Health of City of Globe, 179 Pac. 35.

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health.

Regarding the powers of the educational authorities and the board of health, respectively, it was said:

> While school trustees and educational administrative officers are invested with power to establish, provide for, govern, and regulate public schools within their respective jurisdictions, they are in these respects nowise subject to the direction or control of the State or county or city boards of health, yet when the necessity arises to close the schools for the protection of the public health such emergency, while it exists, is a superior power to that given the school administration officers, and the law of necessity controls the situation during the existence of the emergency giving rise to the power.

In concluding the court said:

> I am of the opinion that the measure adopted by the local board of health, closing the schools of the Globe school district, was, at the time adopted, a valid, enforceable order and regulation for the purpose of reasonably protecting the public health, under authority of chapter 1, title 41, paragraph 4370, subdivision 3; that during the existence of said disease in epidemic form in said community said regulation was binding upon the educational administrative officers, and continued binding so long as such epidemic continued in such form, and no longer.

In another case[1] decided a little later by the same court, it was held that the local board of health had the power to order the closing of motion picture shows during the epidemic. The opinion is short and refers to the previous case as deciding the matter.

[1] Alden *v.* State, 179 Pac. 646.

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DEATHS DURING WEEK ENDED JUNE 7, 1919, IN CITIES.

The table following shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined in certain large cities of the United States during the week ended June 7, 1919.

The data are taken from the "Weekly Health Index," June [illegible], 1919, issued by the Bureau of the Census, Department of Commerce.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended June 7, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.[1]	Influenza and pneumonia (all forms)	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	34	15.7	C. 14.8	2	1.8
Atlanta, Ga.	201,732	60	17.8	C. 18.6	.....	.....
Baltimore, Md.	[2]669,981	220	17.1	A. 16.4	.....	.....
Birmingham, Ala.	197,670	64	16.9	A. 20.0	.....	.....
Boston, Mass.	785,245	232	15.4	A. 15.7	20	1.6
Buffalo, N. Y.	473,220	143	15.6	C. 24.2	.....	.....
Cambridge, Mass.	111,432	34	15.9	A. 12.8	.....	.....
Chicago, Ill.	2,898,681	668	13.4	A. 13.7	34	1.0
Cincinnati, Ohio.	418,022	120	15.0	C. 11.1	.....	.....
Cleveland, Ohio.	810,306	178	11.5	C. 9.8	15	1.0
Columbus, Ohio.	235,290	68	15.7	C. 12.7	4	0.9
Dayton, Ohio.	130,655	31	12.4	C. 14.5	5	2.0
Denver, Colo.	.....	64	.....	.....	.....	.....
Fall River, Mass.	128,392	31	12.6	C. 12.7	4	1.6
Grand Rapids, Mich.	135,450	32	12.3	C. 7.1	.....	.....
Indianapolis, Ind.	290,389	82	14.7	C. 12.2	.....	.....
Jersey City, N. J.	318,770	65	10.6	C. 12.6	.....	.....
Kansas City, Mo.	313,785	74	12.3	C. 13.6	7	1.2
Los Angeles, Calif.	568,495	140	12.8	A. 12.5	4	.4
Louisville, Ky.	242,707	70	15.0	C. 12.4	8	1.7
Lowell, Mass.	109,081	36	16.7	A. 15.2	.....	.....
Memphis, Tenn.	154,759	57	19.2	C. 14.2	2	.7
Milwaukee, Wis.	453,481	94	10.8	A. 11.6	17	2.0
Minneapolis, Minn.	383,442	70	9.5	C. 12.1	.....	.....
Nashville, Tenn.	119,215	37	16.2	C. 15.7	4	1.7
Newark, N. J.	428,684	114	13.9	C. 11.3	.....	.....
New Haven, Conn.	154,805	47	15.8	C. 12.5	.....	.....
New Orleans, La.	382,273	129	17.6	A. 21.2	.....	.....
New York, N. Y.	5,215,870	1,304	13.0	C. 12.4	130	1.6
Oakland, Calif.	214,206	49	11.9	A. 10.2	.....	.....
Omaha, Nebr.	180,264	32	9.3	C. 10.1	.....	.....
Philadelphia, Pa.	1,761,371	502	14.9	C. 14.1	.....	.....
Pittsburgh, Pa.	593,303	185	16.3	C. 12.9	30	2.6
Portland, Oreg.	.....	62	.....	.....	4	.....
Providence, R. I.	263,613	63	12.5	C. 13.5	8	1.6
Richmond, Va.	160,719	50	16.2	C. 19.1	.....	.....
Rochester, N. Y.	264,856	85	16.7	C. 13.6	4	.8
St. Louis, Mo.	779,951	191	12.8	C. 11.1	14	.9
St. Paul, Minn.	257,600	43	8.7	C. 10.1	.....	.....
San Francisco, Calif.	478,530	126	13.7	C. 14.6	13	1.4
Seattle, Wash.	.....	56	.....	.....	6	.....
Spokane, Wash.	.....	21	.....	.....	.....	.....
Syracuse, N. Y.	161,404	38	12.3	C. 12.0	2	.6
Toledo, Ohio.	262,234	77	15.3	A. 12.4	3	.6
Washington, D. C.	401,681	106	13.8	A. 17.4	5	.6
Worcester, Mass.	173,650	44	13.2	C. 9.9	.....	.....

[1] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week, of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.

[2] Population estimated as of July 1, 1919.

[3] Rate is based on statistics of 1915, 1916, and 1917.

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CAMP DIX ZONE, N. J.

Measles:	Cases.
Chesterfield Township	1

FAYETTEVILLE SANITARY DISTRICT, N. C.

Chancroid	1
Chicken pox	1
Gonorrhea	7
Malaria	1
Syphilis	6

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Dysentery:	
Phoenix City	1
Malaria:	
Columbus	1
Muscogee County	3
Bibb City	1
Measles:	
Columbus	5
Muscogee County	3
Pneumonia:	
Columbus	2
Muscogee County	1
Typhoid fever:	
Columbus	1
Whooping cough:	
Columbus	7
Muscogee County	2

CAMP GORDON ZONE, GA.

Atlanta:	
Chicken pox	2
Diphtheria	2
Dysentery	4
Gonorrhea	31
Measles	6
Mumps	1
Scarlet fever	1
Septic sore throat	1
Smallpox	6
Syphilis	21
Tuberculosis	4
Typhoid fever	1
Whooping cough	7

GULFPORT HEALTH DISTRICT, MISS.

Diphtheria:	Cases.
Biloxi	1
Dysentery:	
Gulfport	1
Lyman	4
Gonorrhea:	
Biloxi	2
Gulfport	6
Handsboro	1
Kiln	1
Larue	1
Logtown	1
Moss Point	2
Pascagoula	2
Hookworm:	
Lizana	1
Malaria:	
Biloxi	2
De Lisle	1
East Side	1
Escatawpa	1
Gulfport	11
Handsboro	1
Kiln	1
Landon	1
Logtown	3
Mississippi City	1
Moss Point	6
Ocean Springs	1
Pascagoula	3
Pass Christian	3
Measles:	
Pascagoula	4
Mumps:	
Biloxi	1
Gulfport	1
Long Beach	2
Pass Christian	1
Pellagra:	
Pearlington	1
Gulfport	1
Pneumonia:	
Long Beach	1

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CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	12
Mumps	4
Paratyphoid fever	1
Whooping cough	2
Government clinic:	
Gonorrhea	13
Syphilis	7

CAMP LEE ZONE, VA.

Petersburg:	
Gonorrhea	7
Malaria	1
Syphilis	4
Tuberculosis	4
Typhoid fever	1

CAMP MERRITT ZONE, N. J.

Englewood:	
Chicken pox	3
Pneumonia, lobar	1
Haworth:	
Measles	1

MUSCLE SHOALS SANITARY DISTRICT, ALA.

Lauderdale County:	
Chicken pox	3
Gonorrhea	3
Malaria	2
Mumps	1
Syphilis	6
Tuberculosis	1
Nitrate Plant No. 2:	
Gonorrhea	3

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Malaria	2
Pellagra	1
Syphilis	4
Tuberculosis	1
Typhoid fever	1

Tuberculosis	

CAMP POLK ZONE, N. C

Diphtheria:	
Wake Forest Township	
Gonorrhea:	
Cary Township	
Little River Township	
Raleigh	
Measles:	
Raleigh	
Poliomyelitis:	
White Oak Township	
Syphilis:	
Durham	
Raleigh	
Tuberculosis:	
Raleigh	
Typhoid fever:	
Durham Township	
Marks Creek Township	
Swift Creek Township	
Wake Forest Township	
Whooping cough:	
Durham	
Raleigh	
White Oak Township	

PORTSMOUTH AND NORFOLK CO DISTRICT, VA.

Cerebrospinal meningitis:	
Norfolk County	
Chicken pox:	
Norfolk	
Diphtheria:	
Norfolk	
Measles:	
Norfolk	
Port Norfolk	
Smallpox:	
Portsmouth	
Tuberculosis:	
Portsmouth	
Typhoid fever:	
Portsmouth	

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ary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	488.63	597.15
All troops in United States	806.39	1,152.50
American Expeditionary Forces	322.66	377.00
Annual admission rate per 1,000 (disease only)	416.00	524.45
All troops in United States	673.81	1,011.25
American Expeditionary Forces	281.33	334.64
Noneffective per 1,000 on day of report	23.10	35.34
All troops in United States[1]	46.55	54.43
American Expeditionary Forces	22.41	26.88
Annual death rate per 1,000 (all causes)	7.59	6.94
All troops in United States[1]	9.53	10.16
American Expeditionary Forces	6.58	5.51
Annual death rate per 1,000 (diseases only)	4.83	4.31
All troops in United States[1]	8.05	8.41
American Expeditionary Forces	3.15	2.56

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (properly chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

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Shelby				3	1				
Sherman				10	1	1			
Taylor	2			8	3				1
Travis			1	4	4				
Upton	3			15	2				
Northeastern Department				3	3				
Eastern Department	2			18	2	2			
Southeastern Department			2	2	1				
Central Department				4					
Southern Department	1		1	77	2	3			
Western Department				14	11				
Aviation camps	1			28		2			
Port of embarkation:									
Hoboken	43		1	28	1	3	2	1	
Newport News	13			57	8	108		1	
Fort Monroe				4					
Alcatraz Disciplinary Barracks									
Leavenworth Disciplinary Barracks				2					
Columbus Barracks				1			2		
Jefferson Barracks	1			10	6				
Fort Logan				2	2				
Fort McDowell				2					
Fort Sill				6	5				
Fort Slocum				3					
Fort Thomas				4	3				
West Point				3					
Arsenals				1					
Miscellaneous small stations				5					
Total	78		6	514	81	120	5	2	

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Lowls	3,705			Newport News	23,759	1	1
Meade	10,179			All others	82,524	35	34
Pike	3,420	1					
Shelby	2,284			Total	387,090	71	60

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	10.20	9.29	3.50	7.05
Dysentery		.14	.28	
Malaria	.80	1.30	.77	.44
Venereal	69.18	83.42	57.30	74.45
Paratyphoid				
Typhoid		.14	.28	.25
Measles	.67	1.30	1.19	2.18
Meningitis	.26	.14	.84	.64
Scarlet fever	1.61	.53	.35	.25
Influenza	16.11	9.0		

CURRENT STATE SUMMARIES.[1]

Telegraphic Reports for the Week Ended June 14, 1919.

California.—Influenza: Cases reported 87. Smallpox: Long Beach 2, Orango County 5, Vallejo 1, Alameda 4, Oakland 2, San Francisco 2, South San Francisco 1, Santa Clara County 3, San Jose 4, Turlock 1. Typhoid fever 11 cases, of which in San Francisco 2, San Jose 3, and the others scattered over State. Cerebrospinal meningitis: 1 case reported in Placer County.

Connecticut.—The State reports no outbreak or undue prevalence of disease.

Delaware.—Diphtheria: Greenwood 1, Wilmington 1. Malaria: Dover 2. Measles: Dover 2, Rosello 1, Wilmington 3. Scarlet fever: Wilmington 1. Smallpox: Fairmount 2. Tuberculosis: Dover 1.

[1] These telegraphic reports are preliminary and may be changed when complete reports are received by the State health departments.

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Illinois.—Diphtheria: Cases reported 129, of which in C
Camp Grant 4, Streator 3. Scarlet fever: Cases repo
which in Chicago 51, Oglesby 6, Belvidere 3, Peru 3.
Cases reported 136, of which in Carlock 22, Rock Island
12, Rockford 10, McLeansboro 7, Grandville Townsh
County) 6, Sawyerville 6, Fairmount 6, Canton Townsh
County) 5, Galesburg 5, Pekin 4, Ottawa 3, Witt 3, Jac
Chicago reports 1 case meningitis. Poliomyelitis: Chica
St. Louis 1. Zion City reports 1 case lethargic encephi
fluenza: Cases reported 10, of which in Chicago 8. Gon
syphilis 113.

Indiana.—Scarlet fever reported by counties: Hancock
St. Joseph, and Bartholomew. Smallpox by counties:
Elkhart, Jay, Fountain, Madison, and Montgomery; re
demic in Laporte. Diphtheria by counties: Orange 1,
Huntington 1, Whitley 1, Tippecanoe 1, Ripley 1, Vig
gomery 1. Typhoid fever reported in Hammond. Measl
by counties: Ripley, Elkhart, and Pulaski. Terre Haut
case of rabies. Syphilis 21, gonorrhea 49.

Iowa.—Diphtheria: Cedar Rapids 1, Des Moines 1, Ma
Gonorrhea: Cedar Rapids 1, Cherokee 1, Davenport 2,
Guthrie Center 2, Keokuk 1, Mason City 1, Newton 1, Re
Strawberry Point 3. Measles: Blencoe 1, Council Bluffs
City 1. Mumps: Fort Des Moines 1. Scarlet fever: Bu
Carroll 4, Cedar Rapids 1, Des Moines 6, Dubuque 1, I
Smallpox: Bangor 1, Boone 3, Calumet 1, Cedar Rapids
Falls 2, Council Bluffs 1, Davenport 21, Davis City 21, De
Dubuque 1, Fort Dodge 2, Mason City 1, Minerva 1. Syp
Lake 1, Davenport 5, Des Moines 1, Dubuque 1, Newton 2
ing cough: Council Bluffs 1. In rural districts of followin
Gonorrhea: Jasper 1, Palo Alto 2. Scarlet fever: Ap
Buchanan 1, Keokuk 2, Kossuth 1, Marshall 3, Warren 1,
Smallpox: Hamilton 1, Keokuk 1, Mahaska 2, Marshall 7,

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Township 1, Kanabec County (Ogilvie village) 7, Lyon County (Tracy city) 4, Sherburne County (Lake Fremont village) 5. Syphilis 28, gonorrhea 51, chancroid 2, poliomyelitis 1.

New Jersey.—Cases reported: Influenza 7, pneumonia 56. Smallpox reported from Bordentown (Burlington County). No unusual prevalence of other diseases reported.

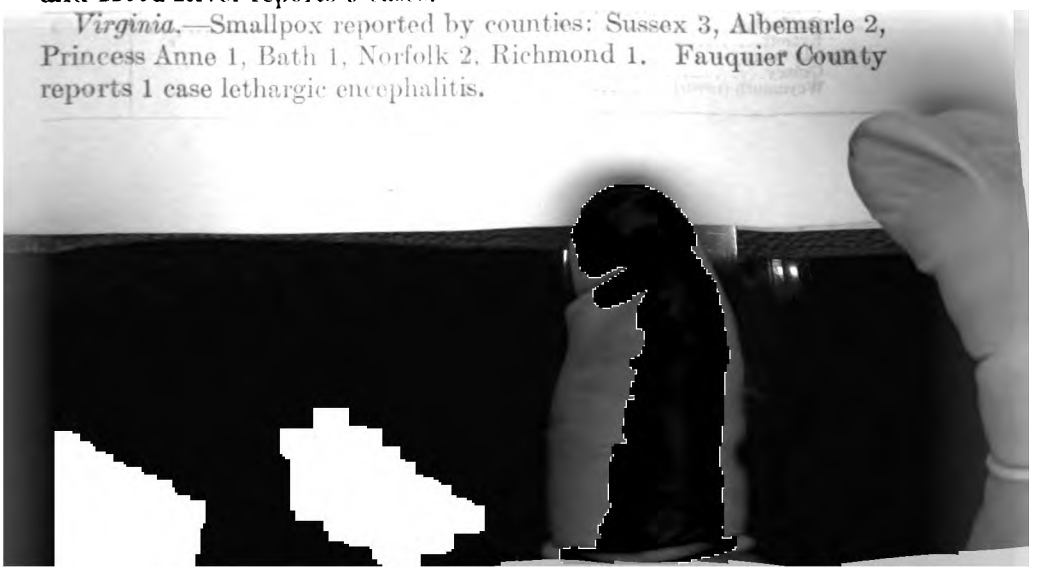
New York.—Reports, exclusive of New York City: Typhoid fever 18, measles 510, scarlet fever 120, whooping cough 75, diphtheria 191. Smallpox: Buffalo 1, Oneonta 1. Cerebrospinal meningitis: Buffalo 1, Yonkers 1. Pneumonia: Cases reported 58. Voluntary reports: Syphilis 279, gonorrhea 85.

North Carolina.—State totals: Whooping cough 143, measles 155, diphtheria 15, scarlet fever 6, septic sore throat 4, smallpox 56, chicken pox 28, infantile paralysis 2, typhoid fever 100, epidemic meningitis 1, broncho-pneumonia 5, lobar pneumonia 3, cholera infantum 32, dysentery (bacillary) 3, dysentery (amebic) 2, gonorrhea 119, syphilis 40, chancroid 10, gonorrhea and chancroid 2, gonorrhea and syphilis 3, gonorrhea, syphilis, and chancroid 1, balanitis 2.

Ohio.—Scarlet fever, 45 cases reported from Cincinnati. Smallpox: Youngstown 20, Alliance 6, Avon 6, Hamilton 5, Mingo Junction 16. Trachoma: Cases reported from Portsmouth 27.

Oregon.—Portland reports 6 cases of and 1 death from influenza, and Hood River reports 9 cases.

Virginia.—Smallpox reported by counties: Sussex 3, Albemarle 2, Princess Anne 1, Bath 1, Norfolk 2, Richmond 1. Fauquier County reports 1 case lethargic encephalitis.



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ANTHRAX.

Chelsea and Peabody, Mass., May, 1919.

During the month of May two cases of anthrax were r
Massachusetts; one at Chelsea, Suffolk County, and one at
Essex County.

Norwood, Ohio—Correction.

The report in the Public Health Reports of April 25 o
and one death from anthrax at Norwood, Ohio, was in
anthrax having occurred at that place.

CEREBROSPINAL MENINGITIS.

State Reports for April and May, 1919.

Place.	New cases reported.
Delaware (May):	
Sussex County—	
Ellendale	1
District of Columbia (May)	1
Maryland (May):	
Baltimore	1
Anne Arundel County	2
Total	3
Massachusetts (May):	
Berkshire County—	
North Adams (town)	1
Bristol County—	
Fall River	2
Essex County—	
Gloucester	1
Haverhill	1
Lynn	2
Middlesex County—	
Belmont (town)	1
Cambridge	1
Everett	2
Norfolk County—	
Quincy	2
Weymouth (town)	1
Massachusetts (May)—Continued.	
Plymouth County—	
Brockton (town)	
Suffolk County—	
Boston	
Winthrop (town)	
Worcester County	
Northboro (town)	
Worcester	
Total	
Nebraska (May):	
Chase County	
Lancaster County	
Total	
South Dakota (April):	
Deuel County	
Lake County	
Stanley County	
Total	

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	Cases.		Cases.
Fayetteville sanitary district, N. C	1	Camp Pike zone, Ark	1

DIPHTHERIA.

Cases Reported in Extra-Cantonment Zones, Week Ended June 14, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga	2	Camp Travis zone, Tex	3
Gulfport health district, Miss	1	Wilmington sanitary district, N. C	1
Camp Polk zone, N. C	1		
Portsmouth and Norfolk County health district, Va	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1395.

GONORRHEA.

Cases Reported in Extra-Cantonment Zones, Week Ended June 14, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	7	Camp Pike zone, Ark	11
Camp Gordon zone, Ga	31	Camp Polk zone, N. C	8
Gulfport health district, Miss	16	Camp Sherman zone, Ohio	3
Camp Jackson zone, S. C	13	Camp Travis zone, Tex	13
Camp Lee zone, Va	7	Wilmington sanitary district, N. C	11
Muscle Shoals sanitary district, Ala	6		

LEPROSY.

Boston, Mass., May, 1919.

During May two cases of leprosy of nodular type were reported at Boston, Mass. In the case of T. W. C., Chinese, male, age 22, the disease was diagnosed clinically and verified bacteriologically May 8. In the case of N. F., Greek, male, age 22, the patient absconded from the hospital and his present whereabouts are unknown.

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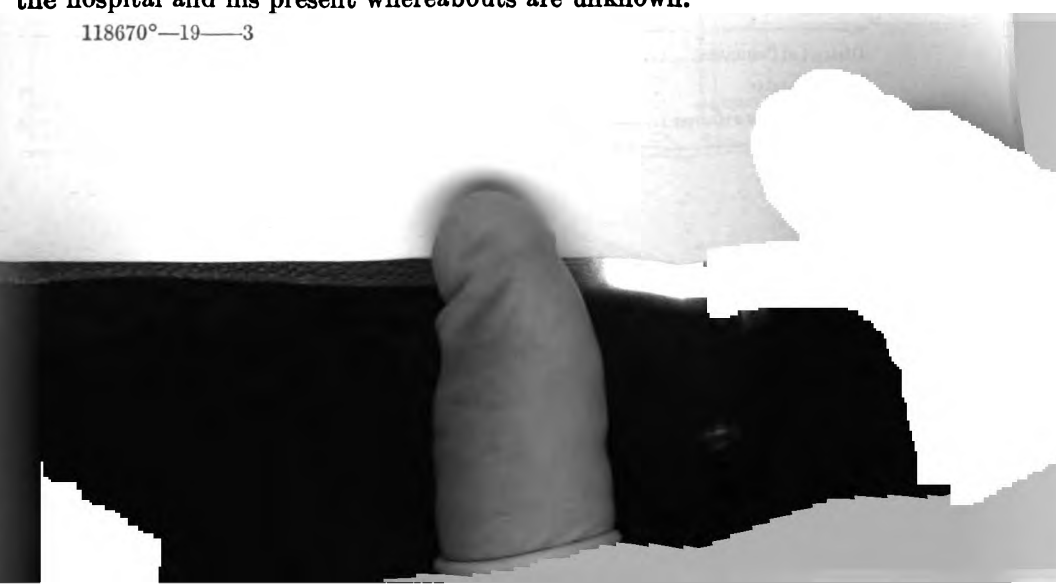

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Brandywine	1	Winthrop (town)	
Mitchellville, R. D	2	Worcester County—	
Wicomico County—		Northbridge (town)	
Salisbury	1		
Bivalve	1	Total	

City Reports for Week Ended May 31, 1919.

Place.	Cases.	Deaths.	Place.
Columbus, Ga	1		Montclair, N. J
High Point, N. C	1		Richmond, Va
Little Rock, Ark	4		Tuscaloosa, Ala
Memphis, Tenn		1	

MEASLES.

Cases Reported in Extra-Cantonment Zones, Week Ended Ju

	Cases.		
Camp Dix zone, N. J	1	Camp Polk zone, N. C	
Gas and Flame school zone, Ga. and Ala	8	Portsmouth and Norfolk Co	
Camp Gordon zone, Ga	6	trict, Va	
Gulfport health district, Miss	4	Wilmington sanitary district	
Camp Merritt zone, N. J	1		

See also Diphtheria, measles, scarlet fever, and tuberculosis, pag

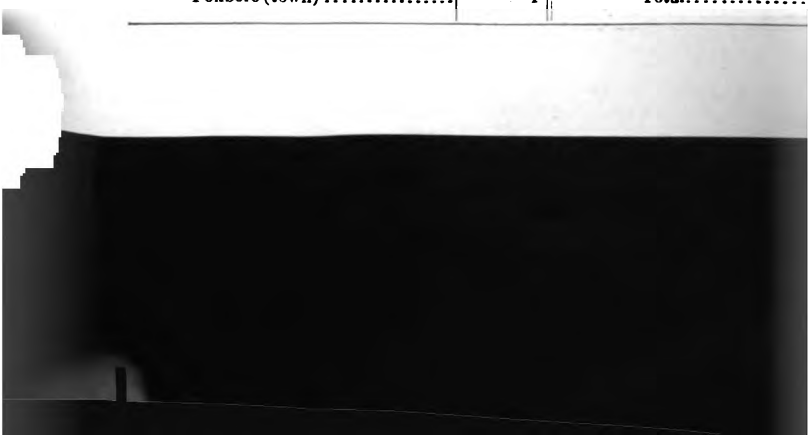
PELLAGRA.

Cases Reported in Extra-Cantonment Zones, Week Ended Ju

	Cases.		
Gulfport Health district, Miss	2	Picric Acid plant zone, Ga	

State Reports for May, 1919.

Place.	New cases reported.	Place.
District of Columbia	1	Massachusetts—Continued.
Massachusetts:		Suffolk county—
Norfolk County—		Boston
Foxboro (town)	1	Total



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PELLAGRA—Continued.

City Reports for Week Ended May 31, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
andria, La	1		High Point, N. C	1	
eville, N. C		1	Lexington, Ky		1
tin, Tex		1	Memphis, Tenn		2
ningham, Ala	1	1	Mobile, Ala	2	2
as, Tex	1		Nashville, Tenn		1

PLAGUE-INFECTED GROUND SQUIRRELS.

Alameda County, Calif.

During the period from May 23 to May 28, inclusive, eight plague-ected ground squirrels (*Citellus beechyi*) were reported found in lo-ties in Alameda County, Calif., respectively about 6 miles south of ıol, 4½ to 5 miles north, and about 7 miles northeast of Altamont. In cases diagnoses were based upon animal inoculation and cultures. ensive hunting and poisoning operations are being carried on.

PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended June 14, 1919.

	Cases.		Cases.
nd flame school zone, Ga. and Ala	3	Camp Pike zone, Ark	2
ort health district, Miss	1	Camp Travis zone, Tex	1
Merritt zone, N. J	1		

City Reports for Week Ended May 31, 1919.

Place.	Lobar.		All forms.		Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
, N. Y	1				Kansas City, Kans	1			
e, Ohio	1				Kansas City, Mo			9	5
a, Ga	1	1			Lackawanna, N. Y	2	3		
ore, Md	13	9			Lawrence, Mass	2	1		
mton, N. Y	2				Los Angeles, Calif	4	2	4	3
, Mass	26	10			Louisville, Ky	3	6		
vick, Ga	1	1			Lowell, Mass	1	1		
c, Mich	1				Lynn, Mass	4	1		
idge, Mass	2	1			Manchester, N. H	1	1		
n, N. J	3				Manitowoc, Wis			2	2
ton, W. Va	1				Marquette, Mich	1			
te, N. C	2	2			Melrose, Mass	1			
, Mass	1	1			Milford, Mass	1	1		
, Ill			152	45	Nashville, Tenn	1			
e, Mass	1				Natick, Mass	1	1		
nd, Ohio	5	9			Newark, N. J	20	8		
us, Ga	2	2			Newburgh, N. Y	1			
n, R. I	1	1	3	3	New London, Conn	1	1		
land, Md	2	1			Newport, Ky	2	2		
, Ohio	1	1			Newport News, Va	1			
, Mich	5	15	6	19	New York, N. Y			37	128
, Minn	2	2			Northampton, Mass	2			
ange, N. J	1				Pasadena, Calif	2			
, Mass	1				Paterson, N. J	13			
ver, Mass	2				Philadelphia, Pa	53	24		
rg, Mass	1				Pittsfield, Mass	1			
lich	1	1			Roanoke, Va	1			
gham, Mass	1	1			Rock Island, Ill	1	1		
ille, N. Y	2				Sandusky, Ohio			3	
tapids, Mich	3				San Francisco, Calif	5	5		
l, Conn	1	2			Springfield, Mass	2			
ill, Mass	3	1			Toledo, Ohio	1	3		
n, Wash			1		Trenton, N. J	2	1		
idence, Mo			3		Watertown, Mass	1			
d, Mich	1				Westfield, Mass	2	1		
wn, N. Y			2	2	Wichita, Kans	1			
zoo, Mich	1	1			Worcester, Mass	4	1		

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POLIOMYELITIS (INFANTILE PARALYSIS).

Maryland and Massachusetts, May, 1919.

Place.	New cases reported.	Place.	New cases reported.
Maryland:		Maryland—Continued.	
Baltimore	1	Worcester County—	
Carroll County—		Snow Hill	1
Sykesville	1	Total	5
Harford County—			
Madonna	1		
Washington County—		Massachusetts:	
Hagerstown	1	Essex County—	
		Ipswich (town)	1

City Reports for Week Ended May 31, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Baltimore, Md	1	1	Middletown, N. Y	1	
Chicago, Ill	2	1	Mount Vernon, N. Y	1	
Columbus, Ohio		1	New York, N. Y	3	
East St. Louis, Ill		1	Superior, Wis		
Houston, Tex	2		Topeka, Kans	1	

RABIES IN ANIMALS.

City Reports for Week Ended May 31, 1919.

Place.	Cases.	Place.	Cases.
Alexandria, La	4	Kansas City, Mo	2
Detroit, Mich	1	Washington, D. C	1
East Orange, N. J	1		

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended June 14, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga	1	Camp Sherman zone, Ohio	1

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1395.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended June 14, 1919.

	Cases.		Cases.
Camp Gordon zone, Ga	6	Camp Sherman zone, Ohio	1
Portsmouth and Norfolk County health district, Va	2		

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SMALLPOX—Continued.

State Reports for May, 1919—Vaccination Histories.

Place.	New cases reported.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
trict of Columbia	50				50	
yland:						
Baltimore	3				3	
Baltimore County—						
Sparrows Point	2				2	
Dorchester County—						
Cambridge	2				2	
Garrett County—						
Johnsons, R. D	1				1	
Prince George County—						
Upper Marlboro	1				1	
Washington County—						
Clearspring, R. D	1				1	
Hagerstown	5				6	
Funkstown	1				1	
Total	17				17	
achusetts:						
Dukes County—						
Edgartown (town)	1				1	
Essex County—						
Gloucester	2				2	
Hampden County—						
Ludlow (town)	1				1	
Springfield	2				2	
Middlesex County—						
Cambridge	1		1			
uffolk County—						
Boston	1				1	
Total	8		1		7	

State Reports for April and May, 1919.

Place.	Cases.	Deaths.
rare (May):		
issex County—		
Fairmount	1	
ska (May):		
x Butte County	1	
ffalo County	12	
rt County	5	
ss County	3	
eyenne County	2	
ster County	5	
dge County	12	
uglas County	148	
anklin County	1	
ontier County	4	
ge County	30	
ward County	2	
nson County	5	
arney County	2	
master County	185	
coln County	3	
maha County	1	
e County	5	
ck County	5	
nders County	10	
tts Bluff County	5	
ard County	14	
ridan County	2	
nton County	3	
shington County	7	
yne County	1	
Total	473	

Place.	Cases.	Deaths.
South Dakota (April):		
Aurora County	2	
Beadle County	33	
Bon Homme County	5	
Brown County	8	
Brule County	7	
Charles Mix County	11	
Codington County	2	
Davison County	1	
Deuel County	1	
Dewey County	1	
Douglas County	3	
Fall River County	2	
Hamlin County	1	
Hand County	5	
Hyde County	1	
Kingsbury County	1	
Marshall County	2	
Miner County	1	
Minnehaha County	2	
Moody County	5	
Spink County	2	
Walworth County	5	
Yankton County	17	
Total	118	

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SMALLPOX—Continued.

City Reports for Week Ended May 31, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
Aberdeen, S. Dak	3		Los Angeles, Calif	3	
Aberdeen, Wash	1		Louisville, Ky	1	
Abilene, Tex	3		Madison, Wis	1	
Alexandria, La	2		Manitowoc, Wis	4	
Anniston, Ala	6		Marinette, Wis	7	
Atchison, Kans	1		Memphis, Tenn	1	
Atlanta, Ga	26		Milwaukee, Wis	19	
Austin, Tex	1		Minneapolis, Minn	20	
Baton Rouge, La	4		Mobile, Ala	6	
Battle Creek, Mich	5		Moline, Ill	5	
Beatrice, Nebr	1		Newark, N. J	1	
Birmingham, Ala	5		New Orleans, La	6	
Boise, Idaho	4		Newport News, Va	5	
Butte, Mont	1		Norfolk, Va	6	
Cape Girardeau, Mo	3		Oakland, Calif	2	
Charleston, W. Va	1		Oklahoma City, Okla	5	
Cheyenne, Wyo	1		Omaha, Nebr	26	
Chicago, Ill	4		Oshkosh, Wis	13	
Cincinnati, Ohio	3		Parsons, Kans	6	
Cleveland, Ohio	8		Pasadena, Calif	2	
Columbus, Ga	3		Pekin, Ill	19	
Columbus, Ohio	2		Peoria, Ill	9	
Council Bluffs, Iowa	9		Pittsburgh, Pa	1	
Covington, Ky	1		Portland, Oreg	24	
Dallas, Tex	10		Portsmouth, Va	2	
Danville, Ill	2		Racine, Wis	16	
Davenport, Iowa	12		Raleigh, N. C	2	
Denver, Colo	15		Red Wing, Minn	7	
Des Moines, Iowa	12		Roanoke, Va	5	
Detroit, Mich	5		Rock Island, Ill	17	
Dubuque, Iowa	2		St. Joseph, Mo	7	
Duluth, Minn	5		St. Louis, Mo	5	
Everett, Wash	12		St. Paul, Minn	16	
Flint, Mich	1		San Francisco, Calif	2	
Fond du Lac, Wis	4		San Jose, Calif	3	
Fort Wayne, Ind	3		Savannah, Ga	1	
Fort Worth, Tex	2		Seattle, Wash	19	
Galesburg, Ill	12		Sioux City, Iowa	2	
Galveston, Tex	1		South Bend, Ind	1	
Grand Rapids, Mich	1		Spokane, Wash	3	
Great Falls, Mont	11		Springfield, Ohio	1	
Green Bay, Wis	1		Steubenville, Ohio	1	
Hammond, Ind	2		Superior, Wis	4	
High Point, N. C	1		Tacoma, Wash	3	
Hoquiam, Wash	6		Tiffin, Ohio	1	
Indianapolis, Ind	2		Toledo, Ohio	2	
Kalamazoo, Mich	2		Topeka, Kans	1	
Kansas City, Kans	1		Vancouver, Wash	2	
Kansas City, Mo	9		Walla Walla, Wash	2	
Kenosha, Wis	2		Washington, D. C	7	
Kokomo, Ind	7		Wichita, Kans	18	
La Fayette, Ind	4		Winston-Salem, N. C	5	
Lincoln, Nebr	8		Yakima, Wash	20	
Logansport, Ind	7		Zanesville, Ohio	1	
Long Beach, Calif	2				

SYPHILIS.

Cases Reported in Extra-Cantonment Zones, Week Ended June 14, 1919.

	Cases.		Cases.
Fayetteville sanitary district, N. C	6	Picric Acid plant zone, Ga	6
Camp Gordon zone, Ga	31	Camp Pike zone, Ark	3
Gulfport health district, Miss	1	Camp Polk zone, N. C	6
Camp Jackson zone, S. C	7	Camp Sherman zone, Ohio	1
Camp Lee zone, Va	4	Camp Travis zone, Tex	1
Muscle Shoals sanitary district, Ala	6	Wilmington sanitary district, N. C	6

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[redacted]		[redacted]	
Picric Acid plant zone, Ga.	1	Camp Travis zone, Tex.	1
Camp Pike zone, Ark.	2	Wilmington sanitary district, N. C.	3

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1395.

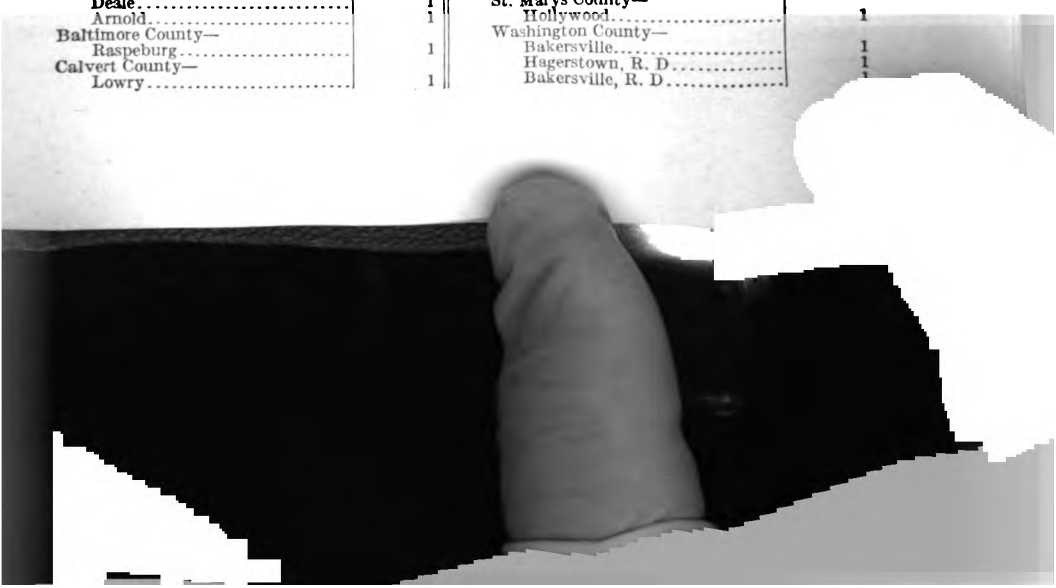
TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended June 14, 1919.

	Cases.		Cases.
Gas and Flame school zone, Ga. and Ala.	1	Camp Pike zone, Ark.	1
Camp Gordon zone, Ga.	1	Camp Polk zone, N. C.	5
Gulfport health district, Miss.	3	Portsmouth and Norfolk County health district, Va.	1
Camp A. A. Humphreys zone, Va.	2	Camp Travis zone, Tex.	2
Camp Lee zone, Va.	1		
Picric acid plant zone, Ga.	1		

State Reports for April and May, 1919.

Place.	New cases reported.	Place.	New cases reported.
Delaware (May):		**Maryland (May)—Continued.**	
Kent County—		Caroline County—	
Felton	1	Mount Zion, R. D.	1
New Castle County—		Cecil County—	
Blackbird	1	Cherry Hill	2
Wilmington	1	Rowlandville	4
Sussex County—		Carroll County—	
Seaford	1	Westminister	1
Total	4	Dorchester County—	
		East New Market	1
District of Columbia (May)	10	Aireys	1
		Cambridge	1
Maryland (May):		Frederick County—	
Baltimore	18	Brunswick	1
Alleghany County—		Garrett County—	
Cresaptown	1	Oakland	1
Old Town, R. D.	3	Howard County—	
Anne Arundel County—		Hanover	1
Annapolis, R. D.	1	Montgomery County—	
Deale	1	Gaithersburg, R. D.	13
Arnold	1	St. Marys County—	
Baltimore County—		Hollywood	1
Raspeburg	1	Washington County—	
Calvert County—		Bakersville	1
Lowry	1	Hagerstown, R. D.	1
		Bakersville, R. D.	1



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TYPHOID FEVER—Continued.

State Reports for April and May, 1919—Continued.

Place.	New cases reported.
Maryland (May)—Continued.	
Washington County—Continued.	
Cavetown	1
Hagerstown	3
Mount Lena	1
Garrets Mill	1
Total	65
Massachusetts (May):	
Berkshire County—	
Dalton (town)	1
Pittsfield	1
Bristol County—	
Fall River	3
New Bedford	1
Essex County—	
Gloucester	2
Lawrence	5
Lynn	2
Marblehead (town)	1
Hampshire County—	
Amherst (town)	1
Middlesex County—	
Arlington (town)	1
Everett	1
Lowell	1
Malden	1
Massachusetts (May)—Continued.	
Middlesex County—Continued.	
Newton	1
Somerville	1
Stow (town)	1
Norfolk County—	
Braintree (town)	1
Needham (town)	1
Norwood (town)	1
Quincy	3
Suffolk County—	
Boston	7
Worcester County—	
Milford (town)	2
Uxbridge (town)	1
Worcester	2
Total	6
Nebraska (May):	
Saline County	1
South Dakota (April):	
Charles Mix County	6
Stanley County	1
Walworth County	3
Total	7

City Reports for Week Ended May 31, 1919.

Place.	Cases.	Deaths.
Alexandria, La	1	1
Atlanta, Ga	1	
Baltimore, Md	3	3
Birmingham, Ala	2	
Boston, Mass	1	2
Buffalo, N. Y	1	2
Centralia, Ill	1	
Charleston, S. C	2	
Chicago, Ill	1	1
Columbus, Ga	1	
Columbus, Ohio	1	
Connellsville, Pa	2	
Dallas, Tex	1	
Des Moines, Iowa		1
Duluth, Minn	1	
Durham, N. C	1	
East Orange, N. J	1	
East St. Louis, Ill	1	
Elizabeth, N. J	1	
Fairmont, W. Va	1	
Fall River, Mass	2	
Fort Worth, Tex	1	
Galveston, Tex	1	1
Great Falls, Mont	1	
Greeley, Colo	1	
Greenville, S. C	1	
Hammond, Ind	1	
Harrisburg, Pa	1	
High Point, N. C	1	
Hutchinson, Kans	3	
Kalamazoo, Mich	1	
Kansas City, Mo		1
Lawrence, Mass	2	
Long Beach, Calif	1	
Long Branch, N. J	1	
Los Angeles, Calif	4	
Louisville, Ky	3	
Lynn, Mass		1
Manchester, N. H	5	
Meriden, Conn	1	
Minneapolis, Minn	1	2
Moline, Ill	1	
Nashville, Tenn	2	
New Haven, Conn	3	
New Orleans, La	2	
New York, N. Y	10	1
Oakland, Calif	1	
Oklahoma City, Okla	1	
Philadelphia, Pa	5	
Plainfield, N. J	1	
Portland, Me	2	
Portland, Oreg	2	
Portsmouth, Va	1	
Providence, R. I	1	
Reno, Nev	1	
Richmond, Va	6	
Rocky Mount, N. C	1	
Sacramento, Calif	2	
St. Louis, Mo	2	
San Francisco, Calif	1	1
Savannah, Ga	1	
Scranton, Pa	1	
Seattle, Wash	1	
Sioux Falls, S. Dak	1	
Spartanburg, S. C	1	
Troy, N. Y	1	
Walla Walla, Wash	1	
Washington, D. C	1	1
Wheeling, W. Va	1	
Wilmington, Del	1	
Wilmington, N. C	1	
Winston-Salem, N. C	2	
York, Pa	1	

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PHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

State Reports for April and May, 1919.

State.	Cases reported.			State.	Cases reported.		
	Diphtheria.	Measles.	Scarlet fever.		Diphtheria.	Measles.	Scarlet fever.
(May)	2	21	6	Massachusetts (May)	559	1,307	805
of Columbia				Nebraska (May)	33	262	75
	119	42	88	South Dakota (April)	32	34	105
(May)	156	545	909				

City Reports for Week Ended May 31, 1919.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
S. Dak	15,926						6			
ass	14,406	2	1				1	1		
Calif	28,433	6	1		2				2	1
. Y	106,632		3		46		4		6	
a, La	16,232	25					2		4	
, Pa	65,109		2		29					
Ohio	19,581		1							
	23,783						1			
Pa	39,712		5		5		2			
Ind	24,230	4								1
r, Mich	15,041	6								1
Ala	14,326								1	
Conn	16,954				6				2	
Wis	18,006	1								
Mass	13,073	1					11			
ark, N. J	14,629	5			9					
N. C	25,656	15					1		5	5
Ohio	22,008	8					7			
Kans	16,786		1				8		1	
a	196,144	56	2		18		6	1	1	3
Mass	19,776	4					2			
ex	36,612		1				1			2
d, Calif	17,543	10							2	5
Md	594,637	176	15	2	13		120		42	22
	12,401	3							1	
ge, La	17,544	5	1		5		3	1		
k, Mich	30,159		9	1	1		2			
N. J	72,204		5		3		1		5	
Nebr	10,437	3								1
, Tex	28,851	12								3
lls, Pa	13,749						1			
Ohio	14,575	5			1					
s	18,547	5			10		1		1	
arbor, Mich	11,009	1								
Calif	60,427	5	1				1			
H	13,892	3								
dass	22,128	4					1			
, Me	17,760	4								
ont	15,123		1		1		5			
ton, N. Y	54,864	13	1				1		2	
am, Ala	189,716	56			11		3		11	5
, N. J	19,013						6			
ho	35,951	7	1				3			
ass	767,813	203	48	2	20		58	1	42	28
, Pa	22,060		1							
i	10,472	1			1					
t, Conn	124,724	31	5		12		3		1	4
onn	16,318	2			8		1		2	
Mass	69,152	10	1						1	1
, Mass	33,526	7			2					
, Ga	10,984	4								
. Y	475,781	136	58	6	90	3	17		29	18
n, Iowa	25,144	7								
n, Vt	21,802	1			1		1			
	28,677		1				1			
nt	44,067		2				5			
dich	10,153	2	1							
	15,995	6	1		1					1

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DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended May 31, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Cambridge, Mass.	114,293	33	1		3		2		4	1
Camden, N. J.	108,117		4				5		7	
Canton, Ill.	13,674	1								
Canton, Ohio.	62,566	12			5	1	1			1
Cape Girardeau, Mo.	11,146						4			
Carlisle, Pa.	10,795		1		33					
Centralia, Ill.	11,838	2					1		2	
Chambersburg, Pa.	12,475				3					
Charleston, S. C.	61,041	21								
Charleston, W. Va.	31,060	9			3		2			1
Charlotte, N. C.	40,759	17	1		6		1		3	3
Chelsea, Mass.	45,405								4	1
Chester, Pa.	41,857		2		6		1			
Cheyenne, Wyo.	[1] 11,320		1		5				2	1
Chicago, Ill.	2,547,201	597	114	10	852	12	69	1	165	89
Chicopee, Mass.	29,950	6							2	
Chillicothe, Ohio.	15,625	3					2			
Cincinnati, Ohio.	414,248	90	7		39	1	32		19	17
Cleveland, Ohio.	692,259	141	26	4	96	3	15		38	15
Clinton, Mass.	[1] 13,075	4			1					
Coatesville, Pa.	14,998				1					
Coffeyville, Kans.	18,331				3					
Cohoes, N. Y.	25,292	5	1				2		3	
Colorado Springs, Colo.	38,955	22							22	7
Columbus, Ga.	20,306	12			15				3	1
Columbus, Ohio.	220,135	61	4	2	10		6		5	6
Concord, N. H.	22,858	7					1		1	1
Connellsville, Pa.	15,876				2		1		2	
Council Bluffs, Iowa.	31,838	9	2		5					
Covington, Ky.	59,623	12			3		3		2	2
Cranston, R. I.	26,773	5								
Cumberland, Md.	20,688	4			4		5	1	1	1
Dallas, Tex.	129,738	26	1						6	
Danville, Ill.	32,959	1			5				2	
Davenport, Iowa.	49,618		1		1					
Dayton, Ohio.	128,939	34	1		10		2		1	
Decatur, Ill.	41,483	11	2				2		4	2
Dedham, Mass.	10,618	3			1		1			
Denver, Colo.	268,439	68	4	1	16		9			13
Des Moines, Iowa.	104,052		3	2			6		1	
Detroit, Mich.	619,648	168	41	5	91	2	51	1	28	16
Dover, N. H.	13,776	5								1
Du Bois, Pa.	14,994		2				1			
Dubuque, Iowa.	40,096		1							
Duluth, Minn.	97,077	23	5		68		2		4	4
Durham, N. C.	26,160	2			1					1
East Chicago, Ind.	30,286	5								
East Orange, N. J.	43,761	4	2		3		1			1
East St. Louis, Ill.	77,312				7		2			1
Eau Claire, Wis.	18,887		1		18		3		1	
Elgin, Ill.	28,362	8					3			
Elizabeth, N. J.	88,830	7					11		3	4
Elmira, N. Y.	38,272	12	1		3					1
El Paso, Tex.	69,149	30					4			7
Englewood, N. J.	12,603	2	1							
Evanston, Ill.	29,304	7			20					
Everett, Mass.	40,160	5							1	
Everett, Wash.	37,205						3			
Fairmount, W. Va.	16,111				4					
Fall River, Mass.	129,828	27	2		22	4			9	4
Fargo, N. Dak.	17,872	7			20				5	3
Findlay, Ohio.	14,858	4			13					
Fitchburg, Mass.	42,119	8								
Flint, Mich.	57,386	10			2					
Fond du Lac, Wis.	21,486	9					3			1
Fort Dodge, Iowa.	21,039	2								1
Fort Scott, Kans.	10,564	3			1		1			
Fort Wayne, Ind.	78,014	14			10		2			2
Fort Worth, Tex.	109,597	17	2							
Fostoria, Ohio.	10,959	2			1					
Framingham, Mass.	14,149	7			7		2		3	

[1] Population Apr. 15, 1919.

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HERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended May 31, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Md	11,225	5	.....	.....	1	.....	.....	.....	.....	.....
Ill	19,844	1	.....	.....	6	.....	2	.....	.....	.....
Ohio	11,034	4	3	.....	.....	.....	.....	.....	.....	.....
l	36,314	10	.....	.....	.....	.....	.....	.....	1	2
Ill	24,629	5	.....	.....	9	.....	1	.....	.....	.....
Tex	42,650	10	.....	.....	.....	.....	.....	.....	1	2
le, N. Y	22,314	.....	1	.....	15	.....	.....	.....	2	.....
ids, Mich	132,861	28	1	1	22	.....	2	.....	2	1
s, Mont	[1] 13,948	.....	.....	.....	.....	.....	4	.....	.....	.....
lo	11,942	4	.....	.....	.....	.....	.....	.....	.....	.....
, Wis	80,017	10	.....	.....	.....	.....	.....	.....	.....	.....
Mass	12,251	8	.....	.....	.....	.....	2	.....	.....	.....
, N. C	20,171	8	.....	.....	.....	.....	.....	.....	.....	1
S. C	18,574	2	.....	.....	.....	.....	.....	.....	.....	.....
Conn	19,594	.....	.....	.....	1	.....	1	.....	3	.....
k, N. J	17,412	2	1	.....	.....	.....	.....	.....	2	.....
Ind	27,016	1	.....	.....	5	.....	.....	.....	.....	.....
Pa	73,276	.....	.....	.....	57	.....	2	.....	.....	.....
J	17,345	.....	.....	.....	.....	.....	.....	.....	1	.....
Conn	112,831	26	3	.....	6	.....	4	.....	3	1
Mass	49,180	20	2	.....	6	.....	.....	.....	1	.....
a	28,981	.....	.....	.....	4	.....	.....	.....	.....	.....
linn	17,550	.....	1	.....	.....	.....	.....	.....	.....	.....
, N. C	13,439	.....	.....	.....	5	.....	.....	.....	.....	.....
J	78,324	10	7	.....	2	.....	.....	.....	3	.....
ich	12,459	1	.....	.....	.....	.....	.....	.....	.....	.....
lass	66,503	10	1	1	.....	.....	6	.....	.....	2
ex	116,878	48	.....	.....	3	.....	1	.....	1	7
Y	12,898	2	.....	.....	.....	.....	.....	.....	.....	.....
, Kans	21,461	.....	.....	.....	1	.....	.....	.....	.....	.....
ce, Mo	11,964	3	.....	.....	.....	.....	.....	.....	1	1
s, Ind	283,622	60	5	.....	28	.....	7	.....	50	12
owa	11,626	.....	1	.....	.....	.....	.....	.....	.....	.....
lo	14,079	2	.....	.....	.....	.....	.....	.....	.....	.....
Mich	15,095	8	.....	.....	.....	.....	.....	.....	.....	2
r	16,017	2	.....	.....	.....	.....	5	.....	1	.....
, N. Y	37,431	16	6	.....	4	.....	3	.....	.....	1
Wis	14,411	9	.....	.....	.....	.....	.....	.....	.....	.....
, N. J	312,557	.....	19	.....	3	.....	6	.....	7	.....
N. Y	10,678	2	.....	.....	.....	.....	.....	.....	.....	1
Pa	70,473	.....	5	.....	16	.....	.....	.....	.....	.....
	33,400	5	.....	.....	.....	.....	.....	.....	2	.....
, Mich	50,408	24	.....	.....	47	1	4	.....	3	3
, Kans	102,096	.....	1	.....	1	.....	.....	.....	8	.....
, Mo	305,816	79	5	1	20	.....	4	.....	3	2
J	24,325	5	2	.....	1	.....	4	.....	2	.....
I	10,725	.....	.....	.....	.....	.....	.....	.....	.....	1
is	32,833	8	1	.....	30	.....	5	.....	.....	.....
Penn	50,112	.....	1	.....	.....	.....	4	.....	2	1
id	21,929	5	.....	.....	.....	.....	2	.....	.....	1
a, N. Y	16,219	7	.....	.....	.....	.....	1	.....	.....	.....
Wis	31,833	10	2	.....	4	.....	.....	.....	1	2
Ind	21,481	7	3	.....	1	.....	.....	.....	.....	.....
Ohio	16,086	7	.....	.....	.....	.....	4	.....	.....	.....
Pa	51,437	.....	.....	.....	.....	.....	1	.....	.....	.....
Kans	13,477	3	.....	.....	.....	.....	.....	.....	1	1
lass	102,923	14	12	.....	.....	.....	6	1	3	3
h, Kans	[1] 19,363	.....	2	.....	.....	.....	.....	.....	.....	.....
Mass	21,365	6	1	.....	11	.....	1	.....	1	.....
Ky	41,997	21	.....	.....	32	.....	1	.....	1	5
	37,145	5	1	.....	41	.....	4	.....	.....	.....
br	46,957	8	.....	.....	1	.....	1	.....	.....	.....
Ark	58,716	12	.....	.....	1	.....	.....	.....	.....	3
Ind	21,338	4	.....	.....	1	.....	2	.....	.....	.....
Calif	29,163	11	.....	.....	1	.....	1	.....	.....	.....
h, N. J	15,733	3	.....	.....	.....	.....	1	.....	.....	.....
o	38,266	12	1	.....	.....	.....	.....	.....	.....	1
, Calif	535,485	117	14	1	9	.....	5	.....	27	16
Ky	240,808	58	10	.....	4	.....	16	.....	4	5
s	114,366	26	4	.....	5	.....	2	.....	4	6
Va	33,497	7	.....	.....	.....	.....	2	.....	2	.....

[1] Population Apr. 15, 1910.

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Medford, Mass	26,681	6					2
Melrose, Mass	17,724	4					
Memphis, Tenn	151,877	64	4	1			5
Meriden, Conn	29,431						
Methuen, Mass	14,320	3					
Middletown, N. Y	15,890				1		
Middletown, Ohio	16,384	4					
Milwaukee, Wis	445,008	79	20	1	8		12
Minneapolis, Minn	373,448		29	1	70	1	29
Mobile, Ala	59,201	24	1			1	1
Moline, Ill	27,976	2	9				
Monessen, Pa	23,070		1				
Montgomery, Ala	44,039	17					
Morgantown, W. Va	14,444	1			1		1
Morristown, N. J	13,410	7	4				
Moundsville, W. Va	11,513	4					
Mount Carmel, Pa	20,709		1		13		
Mount Vernon, N. Y	37,991	9					1
Muscatine, Iowa	17,713						1
Nashua, N. H	27,541	6	1				2
Nashville, Tenn	118,136	44			11		2
Natick, Mass	10,140	2					
Newark, N. J	418,789	97	37	1	11		12
Newark, Ohio	30,317	11	1				1
New Bedford, Mass	121,622	32	2		6		2
New Britain, Conn	55,385	11	1		4		4
New Brunswick, N. J	25,855		2				
Newburgh, N. Y	29,893	10	1				
Newburyport, Mass	15,291	5			1		
New Haven, Conn	152,275	32	7		15		2
New London, Conn	21,199	4	1		1		1
New Orleans, La	377,010	121	5		1		
Newport, Ky	32,133						
Newport, R. I	30,585	5					1
Newton, Mass	44,345	10					
New York, N. Y	5,737,492	1,302	290	35	279	3	8
Niagara Falls, N. Y	38,466	13			3		1
Norfolk, Va	91,148				6		
Norristown, Pa	31,969				8		
North Adams, Mass	[1] 22,019	3	1				
Northampton, Mass	20,006	5					
North Attleboro, Mass	11,248	1					
North Braddock, Pa	15,684				1		
North Tonawanda, N. Y	14,060	7			2		
Norwich, Conn	21,923	1					
Norwood, Ohio	23,269	5			15		
Oakland, Calif	206,405	44	4		3		
Oak Park, Ill	27,816	9	2		47		
Oil City, Pa	20,162		1		31		
Oklahoma City, Okla	97,588	17	1				
Old Forge, Pa	15,479						
Olean, N. Y	16,927	8					
Omaha, Nebr	177,777	38	1	1	42		
Orange, Conn	14,393	6					

[1] Population Apr. 15, 1910.

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IERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Continued.

City Reports for Week Ended May 31, 1919—Continued.

City.	Population as of July 1, 1917 (estimated by U. S. Census Bureau).	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
J	33,636	8			1		2			
ls	36,549	10								2
g, W. Va	21,059	8					5		1	
alif	49,620	9								
J	74,478	9					1		7	2
J. J	140,512		7		1		3		8	
J. Y	19,034	1								
	10,973		1		1					
	72,184	18	6		2		1			2
oy, N. J	42,646	6			1					1
a, Pa	1,735,514	480	66	8	100	2	78	2	108	61
e, Pa	11,871				23					
Ark	17,777						2			
	14,275	8					1			
Pa	586,196		14		35		11		23	
fass	39,678	16							1	1
N. J	24,330	4		1			3			
Mass	14,001	1								
daho	12,806							1		
lif	13,624	4								
ch	18,006		2		3				2	2
r, N. Y	16,727	3					1			
e	64,720	14	1		1		6			3
rog	308,399	56	2		5		11		17	2
Va	40,693	21	1						1	1
Pa	16,987				16					
R. I	259,895	61	10		1		6			10
	56,084	1					1		3	
	36,832	7					2			
ss	39,022	6					7			
	47,465	12			8					1
I	10,361	1								
C	30,274	7							1	
	111,607		1		2					
alif	14,573	4								1
	15,514	5			1		1			
Va	158,702	48	1		7		3		32	6
alif	20,496	6								2
a	48,282	11			13		1		1	1
	56,739	15			9	1	2			1
Ill	29,452	6			2					
, N. C	12,673	6							2	2
	21,259		1		2		1			
	15,038	6								
Calif	68,984	19	1				4			2
ch	56,469	12					4			
inn	12,013		1							
lo	86,498	27	1	1						1
o	768,630	174	44	3	109	3	20	1	20	16
nn	252,465	57	50	4	91	1	10	1	8	8
	49,346	10	3				1		1	1
	21,274	1								
ty, Utah	121,623	22	1	1			2			1
lino, Calif	17,616	12								5
alif	56,412	13			1		2			
hio	20,226	8							2	
o, Calif	471,023	39	7	1	2		1		28	14
lif	39,810						2		1	1
ra, Calif	15,360	2								
Calif	15,150	3								
rings, N. Y	13,839	4							1	1
s	10,210	4			3		5		1	
arie, Mich	14,130	3	1						1	1
a	69,250	31							2	4
N. Y	103,774	10	3		4		5		3	
	149,541		1				3		6	
h	366,445		6		19		10			
a	21,274		4		34					
S. Dak	15,887	6			2		4			
Mass	88,618	24	3	1			6		3	5
Ind	70,967	14	3		4					
Mass	14,465	3								

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Trinn, Ohio	12,[illegible]	0	1				
Toledo, Ohio	202,010	68	2		130	1	11
Topeka, Kans	49,538	13	1				
Trenton, N. J	113,974	32	2		51	1	5
Troy, N. Y	78,094	24	1	1			1
Tuscaloosa, Ala	10,824	2	1				
Uniontown, Pa	21,600				1		
Vallejo, Calif	13,803	1					
Vancouver, Wash	13,805		1				
Walla Walla, Wash	26,067				1		2
Waltham, Mass	31,011	5			1		
Washington, D. C	369,282		24	6	9		18
Waterbury, Conn	89,201	3	4		30	1	6
Watertown, Mass	15,188	4					1
Wausau, Wis	19,666	3					1
West Chester, Pa	13,403		1		7		4
Westfield, Mass	18,769	3					2
West New York, N. J	19,613	4	1				
Wheeling, W. Va	43,657	8					4
Wichita, Kans	73,597	20	1		2		1
Wilkes-Barre, Pa	78,334		1		13		
Wilmington, Del	95,369	21					
Wilmington, N. C	30,400	15					
Winchester, Mass	10,812	2					
Winston-Salem, N. C	33,136	15			11		
Winthrop, Mass	13,105						1
Woburn, Mass	16,076	9					
Worcester, Mass	166,106	30	7		37		8
Yakima, Wash	22,058				1		12
Yonkers, N. Y	103,066	33	3		5		2
York, Pa	52,770		1		2		6
Zanesville, Ohio	31,320	10					1

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FOREIGN.

AUSTRALIA.

Influenza—State of Victoria.

Under date of February 2, 1919, there were 1,241 cases of influenza ported in the State of Victoria, Australia. Estimated population, ecember 31, 1917, 1,411,004.

CUBA.

Communicable Diseases—Habana and Regla.

Communicable diseases have been notified at Habana and Regla follows:

Disease.	Apr. 21–30, 1919.		Remaining under treatment Apr. 30, 1919.
	New cases.	Deaths.	
ienza			3
rosy			17
aria	17	1	[1] 25
typhoid fever			3
let fever			1
hoid fever	13	1	[2] 66

[1] From the interior, 19. [2] From the interior, 29.

GREAT BRITAIN.

Influenza—Mortality, 1919—Birmingham.

atalities from influenza have been reported at Birmingham, gland, as follows: Period from December 29, 1918, to January 25, 9, 41; four weeks ended February 22, 128; four weeks ended rch 29, 638; four weeks ended April 26, 131.

NETHERLANDS.

Typhus Fever—April, 1919.

During the month of April, 1919, 16 cases of typhus fever were ified in the Netherlands. Of these cases 2 occurred at Amster- 1, 4 at Naaldwijk, 9 at Rotterdam, and 1 at Wateringen. The al number of cases of typhus reported in the Netherlands to April 1919, was 769.

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Bagdad	Apr. 12–18	1	1	
Philippine Islands:				
Provinces				Apr. 27–May 3, deaths, 72.
Batangas	Apr. 27–May 3	7	5	
Laguna	do	38	31	
Pampanga	do	42	36	
Siam:				
Bangkok	Mar. 23–Apr. 5	6	2	

PLAGUE.

China:				
Hongkong	May 25–31	74	72	
Egypt				Jan. 1–Apr. 24 deaths, 103.
Cities—				
Suez	Apr. 12–17	16	10	1 septicemic.
Provinces—				
Assiout	Apr. 17	22	4	15 cases septice
Beni-Souef	Apr. 22	1	1	
Minieh	do	1	1	
India				Apr. 6–12, 1 deaths, 2,092.
Calcutta	Apr. 20–26		23	
Karachi	Apr. 20–May 7	54	36	
Rangoon	May 6–19	73	69	
Indo-China:				
Saigon district				Apr. 7–20, 1919: 7.
Cholon	Apr. 7–20	1		
Saigon	do	1		
Java:				
East Java				Mar. 12–Apr. deaths, 59.
Surabaya	Mar. 12–Apr. 1	10	10	
Mid-Java				Mar. 21–27, 1919 15.
Samarang	Mar. 21–27	7	7	
Mesopotamia:				
Bagdad	May 12–18	59	44	

SMALLPOX.

Brazil:				
Sao Paulo	Apr. 19–25		2	
Canada:				
New Brunswick—				
Campbellton	Apr. 6–May 10	2		
Nova Scotia—				
Halifax	May 25–31	3		Present in 4 o
Sydney	May 17–24	1		
Quebec—				
Quebec	May 25–31	4		
China:				
Amoy	Apr. 8–14		3	Apr. 15–28: Pr
Antung	May 5–11	1		
Canton	Apr. 20–May 3			Present.
Hongkong	Apr. 13–May 3	7	2	
Tientsin	May 4–10	1		
Denmark:				
Copenhagen	Apr. 6–May 3	20		

[1] From medical officers of the Public Health Service, American consuls, and oth

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IOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended June 20, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
pt:				
Alexandria	Apr. 30-May 13	44	9	
nce:				
Paris	Apr. 20-May 3	4		
at Britain:				
London	Apr. 27-May 17	4		
Southampton	May 18-24	1		
ece:				
Saloniki	Apr. 6-May 10		45	
a:				
Calcutta	Apr. 20-26		81	
Karachi	Apr. 20-May 3	18	18	
Rangoon	Apr. 6-19	138	56	
-China:				
Saigon district				Apr. 7-20, 1919: Cases, 33; deaths, 2.
Saigon	Apr. 7-20	1		
:				
Gastroreale	May 12-18	1	1	
Messina	do	3		
Milazzo	do	5	1	
Naples	do	29	31	
n:				
Kobe	Apr. 27-May 3	34	15	
Taihoku	Apr. 23-29	1		
Tokyo	Apr. 26	1		
Yokohama	Apr. 21-27	1		
West Java				Mar. 28-Apr. 7, 1919: Cases, 124; deaths, 35.
Batavia	Mar. 28-Apr. 17	5	4	
oundland:				
t. Johns	May 24-30	1		
s:				
unis	May 2-8	4		

TYPHUS FEVER.

t:				
lexandria	Apr. 30-May 13	242	57	
Britain:				
iverpool	May 11-17	1		From vessel.
e:				
loniki	Apr. 6-May 10		10	
ovince—				
Aquila	Apr. 28-May 4	24		One locality. Prisoners of war.
Arezzo	do	1		One locality. Military.
Avellino	do	1		One locality. Civil.
Bari	do	1		One locality. Military.
Caltanisetta	do	1		One locality. Prisoner.
Caserta	do	85		One locality. 7 military, 78 prisoners.
Florence	do	1		One locality. Prisoner.
Genoa	do	6		One locality. Prisoners.
Naples	do	6		One locality. Civil; 1 prisoner.
Pisa	do	4		One locality. Prisoners.
Porto Maurizio	do	1		One locality. Military.
Reggio Calabria	do	1		One locality. Civil.
Rome	do	17		One locality. Prisoners.
Salerno	do	5		Do.
Udine	do	2		Do.
Venice	do	8		Do.
gasaki	do	15	1	
lands:				
sterdam	Apr. 6-12	2		
aldwijk	Mar. 30-Apr. 19	4		
tterdam	Apr. 1-30	9		
steringen	Mar. 30-Apr. 5	1		
:				
hangel	Apr. 1-15	1	2	
nis	May 2-8	2		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 13, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks
Ceylon:				
Colombia	Nov. 17-30	4	5	
China:				
Swatow	June 8			Present.
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 12-19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.
India:				
Bombay	Aug. 18-Dec. 28	1,351	1,031	
Do	Dec. 29-Mar. 22	9,691	8,810	
Calcutta	Sept. 20-Dec. 21		241	Reports for weeks ended Nov. 2, 1918, and Mar. 29, 1919, missing
Do	Dec. 29-Apr. 19		1,668	
Karachi	Jan. 26-Mar. 22	3	3	
Madras	Oct. 5-Dec. 28	204	164	Oct. 27-Nov. 2, 1918. Cases 6 deaths, 4.
Do	Jan. 5-Apr. 19	430	320	
Rangoon	Oct. 5-Dec. 21	35	25	
Do	Dec. 29-Apr. 5	57	45	
Indo-China				July 1 Oct. 31, 1918. Cases, 732 deaths, 472.
Anam	July 1-Aug. 31	27	20	
Cambodia	July 1-Oct. 31	234	171	
Cochin China	do	426	327	
Saigon	Oct. 7-Dec. 22	75	45	
Do	Dec. 3-Apr. 6	543	348	
Kwang-Chow-Wan	July 1-31	50	34	
Tonkin	July 1-Oct. 31	6		
Java:				
East Java				Oct. 7-Dec. 31, 1918. Cases, 2[illegible] deaths, 223. Jan. 1-Mar. 2[illegible] 1919: Cases, 75[illegible] deaths, 700.
Surabaya district	Oct. 7-Dec. 31	655	423	
Do	Jan. 1-Mar. 17	357	282	
Mid-Java				Sept. 25-Dec. 1[illegible] 1918. Cases 3,282; deaths, 2,084. Jan. 2-Mar. 14, 1919: Cases, 1[illegible] deaths, 1,573.
Samarang	Sept. 26-Oct. 16	120	111	
West Java				Oct. 3-Dec. 11, 1918. Cases 432 deaths, 225. Dec. 27, 1918-Mar. 13, 1919: Cases, 12; deaths, 3.
Batavia	Oct. 3-Dec. 11	291	148	
Do	Dec. 27-Mar. 3	3	2	
Cheribon	Jan. 3-Mar. 3	3		
Mesopotamia:				
Bagdad	Oct. 11-18	8		
Philippine Islands:				
Manila	Sept. 22-Dec. 28	269	135	
Do	Dec. 29-Apr. 19	51	23	
Provinces				Nov. 3-Dec. 28, 1918: Cases, 1,[illegible] deaths, 1,[illegible]15. Dec. 29, 1918-Apr. 19, 1919: Cases, 1,4[illegible] deaths, 1,022.
Albay	Dec. 15-21	1	1	
Ambos Camarines	Feb. 15-21	10	3	
Bataan	Nov. 17-Dec. 28	38	32	
Batangas	Nov. 3-Dec. 28	258	220	
Do	Dec. 29-Apr. 19	90	68	
Bohol	Nov. 2-Dec. 28	29	24	
Do	Dec. 29-Mar. 29	88	55	
Do	Apr. 6-12	10	6	
Bulacan	Oct. 12-Dec. 28	51	8	
Do	Dec. 29-Feb. 21	42	26	
Capiz	Dec. 22-28	7	5	
Do	Jan. 5-25	28	14	
Cavite	Oct. 27-Dec. 21	207	115	
Do	Dec. 29-Apr. 19	18	17	
Cebu	Nov. 10-Dec. 21	59	27	
Do	Jan. 12-Apr. 19	39	15	
Ilocos Sur	Dec. 8-28	17	8	
Do	Dec. 29-Feb. 15	56	33	
Iloilo	Oct. 27-Dec. 21	112	78	
Do	Jan. 5-Mar. 29	194	125	
Laguna	Oct. 27-Dec. 28	18	11	
Do	Dec. 29-Apr. 19	182	146	
Lanao	Jan. 5-11	8	4	
Mindoro	Nov. 21-30	7	14	
Misamis	Oct. 27-Nov. 2	9	5	
Do	Nov. 17-Dec. 28	75	48	
Do	Jan. 5-Mar. 29	194	88	
Nueva Ecija	Jan. 12-25	9	6	
Occidental Negros	Feb. 2-Mar. 21	8	6	
Oriental Negros	Nov. 2-Dec. 7	22	18	
Do	Jan. 6-Feb. 8	35	22	

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OLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 13, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
lippine Islands—Contd.				
Provinces—Continued.				
Pampanga	Nov. 24-Dec. 14	4	4	
Do	Jan. 5-Apr. 19	118	83	
Pangasinan	Nov. 2-Dec. 28	930	652	
Do	Dec. 29-Apr. 19	169	131	
Rizal	Oct. 27-Nov. 2	3	1	
Do	Nov. 24-30	16	5	
Samar	Dec. 15-21	8	1	
Sorsogon	Nov. 17-23	8	4	
Do	Jan. 19-Feb. 8	44	36	
Tayabas	Nov. 3-Dec. 28	60	40	
Do	Dec. 29-Feb. 15	69	62	
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-Feb. 8	25	21	
d:				
lonsk district	Oct. 2-Nov. 27	5	.....	
arsaw	Sept. 29-Oct. 26	5	1	
a:				
etrograd	To July 16	3,388	1,054	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 5-Aug. 21, 1918: Cases, 884; deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 279.
ia:				
katerinaslav	Sept. 1-20	7	6	
essa	....do	25	.....	Sept. 1-20, 1918: 11 cases on s. s. Helena.

PLAGUE.

rto Alegre	.....	.....	.....	Present in April, 1919.
:				
mbo	Oct. 27-Nov. 2	1	1	
Do	Feb. 9-Apr. 5	14	10	
noy	Nov. 24-Dec. 8	.....	.....	Do.
ngking	Dec. 1-7	.....	.....	Do.
g-Ning district	Mar. 15	.....	.....	Do.
gkong	Oct. 1-Dec. 28	4	4	
Do	Jan. 1-Apr. 5	44	39	May 4-17, 1919: Deaths, 65. May 18-31, 1919: Cases, 71. June 1-6, 1919: Cases, 41; deaths, 37.
or:				
ran	Feb. 16-Mar. 16	2	1	
ayaquil	July 1-Dec. 31	20	7	
Do	Jan. 1-Apr. 30	55	17	
ra	Dec. 16-31	1	1	
ies—	.....	.....	.....	Jan. 1-Nov. 21, 1918: Cases, 357; deaths, 153. Jan. 1-May 1, 1919: Cases, 202; deaths, 114.
Alexandria	Mar. 23	1	1	
Suez	Jan. 31-Apr. 29	57	34	
vinces—				
Assiout	Feb. 24-Apr. 5	.....	9	1 septicemic.
Fayoum	Apr. 26	13	3	
Girgeh	Feb. 22-Mar. 22	10	5	2 pneumonic.
Minieh	Feb. 21-27	2	2	1 pneumonic.
nbay	Aug. 18-Dec. 28	41	29	Sept. 23-Dec. 28, 1918: Cases, 24,279; deaths, 18,360. Dec. 29, 1918-Mar. 1, 1919: Cases, 25,506; deaths, 19,401. Mar. 9-15, 1919: Cases, 13,981; deaths, 5,402. Mar. 30-Apr. 5, 1919: Cases, 4,193; deaths, 3,458.
Do	Jan. 12-Mar. 22	68	52	
utta	Dec. 22-28	.....	1	
Do	Jan. 12-Apr. 19	.....	145	
achi	Oct. 19-Dec. 28	17	17	
Do	Dec. 29-Apr. 19	73	60	
ras	Dec. 8-23	26	17	
Do	Dec. 29-Apr. 5	206	117	
ras Presidency	Oct. 13-Dec. 28	1,152	774	Oct. 27-Nov. 2, 1918: Cases, 142; deaths, 38.
Do	Dec. 29-Apr. 19	2,583	1,743	
gon	Oct. 5-Dec. 21	84	81	
Do	Dec. 29-Apr. 5	315	303	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 13, 1919—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China				July 1-Oct. 21, 1918: Cases, [illegible] deaths, 145.
Anam	July 1-Oct. 31	42	36	
Cambodia	do	72	72	
Cochin-China	do	65	36	
Saigon	Oct. 7-Nov. 24	5	1	
Do	Jan. 13-Apr. 6	28	19	City and vicinity.
Kwang-Chow-Wan	July 1-31	1	1	
Java:				
East Java				Oct. 7-Nov. 15, 1918: Cases, [illegible] deaths, 169. Jan. 1-Feb 28, 1919: Cases, 178; deaths 178.
Surabaya (district)	Oct. 7-Dec. 31	92	92	
Do	Jan. 1-Feb. 25	49	49	
Mid-Java				Sept. 23-Oct. 16, 1918: Cases 14, deaths, 14. Jan. 30-May 14, 1919: Cases, 206; deaths, 206.
Samarang	Sept. 25-Oct. 16	6	6	
Mesopotamia:				
Bagdad	Nov. 16-29	5	2	
Do	Feb. 22-Apr. 11	168	89	
Siam:				
Bangkok	Sept. 21-Oct. 12	6	5	
Do	Jan. 19-Feb. 22	7	6	
Venezuela:				
Caracas	Dec. 30	1		
On vessel:				
S. S. Japan	Jan. 14	1	1	At Suez quarantine station from Bombay.
S. S. Sparta	May 21	1	1	At Liverpool, England, from Bombay.

SMALLPOX.

Algeria:				
Algiers	Oct. 1-Dec. 31	2	1	
Do	Mar. 1-31	1	1	
Arabia:				
Aden	Apr. 14-21		1	
Austria				Dec. 1, 1918-Jan. 11, 1919: Cases, 68. Jan. 12-Mar. 15, 1919: Cases, 134.
Vienna	Dec. 1-Jan. 11	6		
Do	Feb. 9-Mar. 15	28		
Bohemia				Feb., 1919: Reported prevalent. Mar., 1919: Cases 57
Gablonz	Feb.-Mar.	974	19	
Brazil:				
Bahia	Mar. 30-Apr. 5	5		
Rio de Janeiro	Dec. 1-28	46	19	Oct. 6-12, 1918: Cases, 13, deaths, 10.
Do	Dec. 30-Mar. 22	42	19	
Sao Paulo	Mar. 3-16		2	
British East Africa:				
Mombasa	Sept. 1-Nov. 30	6	1	
Canada:				
New Brunswick—				
Campbellton	Dec. 22-28	1		
Do	Jan. 5-18	2		
St. John	Nov. 8-14	3		
Do	Jan. 26-Feb. 22	6		
Nova Scotia—				
Bear River	Dec. 29-Jan. 4			Present.
Bigbee	Jan. 10			Do
Cape Sable Island	May 13			Present on south side.
Digby	Jan. 4			Present
Halifax	Dec. 7-28	10		
Do	Jan. 5-May 24	378		Present in 20 other localities.
Middleton	Dec. 29-Jan. 4			Present.
Sydney	Jan. 5-Mar. 8	4		
Do	Mar. 23-May 10	10		
Ontario—				
North Bay	Jan. 19-25	1		
Ottawa	Jan. 12-May 31	14		
Toronto	Feb. 2-15	2		
Do	Mar. 16-22	1		
Prince Edward Island—				
Charlotte Town	Feb. 27-Apr. 16	2		
Quebec—				
Montreal	Jan. 24-Dec. 21	2		
Do	Jan. 12-May 10	32		
Paspebiac	Jan. 12-Mar. 8	8		
Quebec	Dec. 13-21	1		
Do	Dec. 29-May 24	27		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 13, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
on:				
Colombo	Jan. 12-Apr. 5	5		
a:				
Amoy	Oct. 13-Dec. 28			Present.
Do	Mar. 11-Apr. 12	4	3	Do.
Antung	Feb. 10-16	1		
Do	Feb. 24-Mar. 2	1		
Canton	Nov. 17-23			Do.
Do	Feb. 9-15			Do.
Changsha	Mar. 16-Apr. 12	5		
Chungking	Nov. 10-Dec. 23			Do.
Do	Jan. 5-Apr. 19			Do.
Foochow	Nov. 24-Dec. 28			Do.
Do	Dec. 29-Apr. 5			Do.
Hankow	Apr. 13-19	1		
Hongkong	Dec. 15-21	1	1	
Do	Feb. 2-8	1		
Do	Feb. 16-Apr. 12	9	3	
Nanking	Dec. 1-23			Do.
Do	Dec. 23-Apr. 26			Do.
Shanghai	Jan. 20-26	1		
Tsingtao	Mar. 3-9	2		
a (Korea):				
Chemulpo	Nov. 1-Dec. 31	15	4	
Do	Jan. 1-Mar. 31	16	7	
Fusan	Feb. 1-Mar. 31	20	16	
Seoul	Feb. 1-Mar. 31	3	1	
mbia:				
Barranquilla	Apr. 6-12		1	
mark:				
Copenhagen	Nov. 9-Dec. 28	12		
Do	Dec. 29-Apr. 5	101		
t:				
Alexandria	Dec. 17-23	1	1	
Do	Jan. 22-Apr. 29	36	15	
nd				Jan. 1-Apr. 15, 1919: Cases, 936.
vinces:				
Abo Och Björneborg	Jan. 1-Apr. 15	91		
Kuopio	do	188		
Nyland	do	25		
St. Michael	do	135		
Tavastehus	do	16		
Aleaborg	do	1		
Vasa	do	16		
Viborg	do	464		
e:				
rdeaux	Feb. 8-13		1	
est	Feb. 2-8	1		
ris	Mar. 2-Apr. 19	13	3	
ny				Nov. 24-Dec. 7, 1918: Cases, 34.
sden	Nov. 24-Dec. 7	18		Dec. 8, 1918-June 11, 1919: Cases, 177. Additional cases reported later, 54, for week ended Jan. 11. Feb. 16-Mar. 22, 1919: Cases, 230; among soldiers and prisoners of war, 715 cases.
lle	do	4		
edland	do	1		
nigsberg	do	8		In persons evacuated from the Ukraine.
Neuditz	do	1		
sit	do	1		
gau	do	1		
-la-Chapelle (district)	Dec. 8-Jan. 11	17		
sel	do	10		
nzig	do	3		
isthal	do	8		District of Gumbinnen.
sden	Dec. 8-Feb. 15	247		26 additional cases reported later at Dresden.
lle	Dec. 8-Jan. 11	5		
nover	do	7		Among interned Russians.
nigsberg	do	15		
towitz	do	5		
rodo	do	6		
sa	do	4		District of Dresden.
n:				
erpool	Jan. 26-Mar. 15	7		Of these, 2 from vessels.
den	Mar. 9-Apr. 26	13	2	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 13, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Saloniki	Feb. 2-Apr. 5		43	
India:				
Bombay	Aug. 16-Dec. 28	35	8	
Do	Dec. 29-Mar. 22	430	170	
Calcutta	Sept. 29-Dec. 28		17	Reports for weeks ended Nov. 2, 1918, and Mar. 22, 1919, missing
Do	Dec. 29-Apr. 12		606	
Karachi	Sept. 29-Dec. 28	13	4	
Do	Dec. 29-Apr. 19	138	68	
Madras	Oct. 5-Dec. 28	62	40	
Do	Dec. 29-Apr. 19	295	131	
Rangoon	Oct. 20-Dec. 21	23	6	
Do	Dec. 29-Apr. 5	1,012	491	
Indo-China:				
Anam	July 1-Oct. 31	146	67	
Cambodia	Aug. 1-Oct. 31	105	74	July 1-Oct. 31, 1918: Cases, 69; deaths, 264.
Cochin-China	July 1-Oct. 31	400	113	
Saigon	Oct. 7-Dec. 22	20	5	
Do	Dec. 30-Apr. 6	119	21	City and vicinity.
Tonkin	July 1-Oct. 31	20	1	
Italy:				
Andria	Mar. 10-16	1		Province of Bari.
Barletta	Mar. 3-9	2		Do.
Genoa	Jan. 9-Mar. 15	4	2	
Lecce (Province)	Feb. 17-23	2		
Leghorn	Apr. 14-30	1		
Messina	Mar. 2-30	4		Cases reported in several localities in Province.
Naples	Mar. 10-May 11	55	31	
Palermo	Jan. 31-Apr. 16	68	2	
Turin	Jan. 27-Mar. 23	9	2	
Japan:				
Kobe	Oct. 26-Dec. 28	186	46	
Do	Dec. 29-Apr. 26	596	205	
Nagasaki	Mar. 31-Apr. 6	3		
Nagoya	Mar. 2-15	2		
Taihoku	Jan. 15-Apr. 15	151	18	Island of Formosa.
Yokohama	Jan. 20-26	1		
Java:				
East Java				Oct. 7-Dec. 21, 1918: Cases, 12; deaths, 1. Jan. 1-Feb. 24, 1919: Cases, 4; deaths, 1.
Surabaya (district)	Oct. 7-Dec. 21	10		
Do	Jan. 1-Feb. 25	4	2	
Mid-Java				Sept. 28-Dec. 13, 1918: Cases, 172; deaths, 3. Jan. 24-28, 1919: Cases, 1.
West Java				Oct. 2-Dec. 11, 1918: Cases, 600;
Batavia	Oct. 2-Dec. 11	185	151	deaths, 263. Dec. 27, 1918-Mar. 27, 1919: Cases, 561;
Do	Dec. 27-Mar. 27	49	27	deaths, 118.
Lithuania				Sept. 1-Oct. 26, 1918: Cases, 44.
Manchuria:				
Dairen	Jan. 15-21	1		
Do	Feb. 22-Apr. 28	5	2	
Mesopotamia:				
Bagdad	Oct. 11-Dec. 27	206	97	
Do	Dec. 28-Feb. 9	8		
Mexico:				
Ciudad Juarez	Nov. 24-30	1		
Guadalajara	Mar. 1-31	1		
Do	Mar. 29-Apr. 30	1		
Mexico City	Sept. 22-Dec. 28	28		
Do	Dec. 29-May 3	28		
Vera Cruz	Feb. 10-Apr. 12	2	1	
Newfoundland				Outports—Dec. 6-27, 1918: Cases, 78. Dec. 28, 1918-May 31, 1919: Cases, 222.
St. Johns	Dec. 6-20	4		
Do	Jan. 24-May 22	50		
Panama				Aug. 1-31, 1918: Cases, 153, occurring at Colon, Panama, and points in the Interior. Jan. 1-25, 1919: Cases, 28.
Colon	Dec. 15-21	1		
Do	Dec. 29-Feb. 9	8		
Philippine Islands:				
Manila	Nov. 2-16	5	3	
Do	Dec. 29-Apr. 19	43	22	Varioloid, 18.
Portugal:				
Lisbon	Nov. 16-Dec. 28	943		
Oporto	Mar. 9-May 10	148	98	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 13, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
ortuguese East Africa:				
Lourenco Marques				July 1–Oct. 31, 1918: 45 fatal cases
beria:				
Vladivostok	Nov. 1–3	4		
Do	Jan. 17–23		1	
Do	Feb. 1–Mar. 15	16	1	
ain:				
Barcelona	Jan. 9–Feb. 11		5	
Do	Feb. 19–Apr. 16	6	2	
Bilbao	Jan. 1–Feb. 20	6		
Cadiz	Oct. 1–Dec. 31	18		
Do	Jan. 1–Mar. 31		35	
Madrid	Sept. 1–Oct. 31	153		
Do	Jan. 1–Mar. 31		81	
Seville	Nov. 1–Dec. 31		8	
Do	Jan. 1–Mar. 31		5	
Valencia	Nov. 10–Dec. 31	40	9	
Do	Dec. 20–Jan. 25	93	10	
Do	Feb. 16–Apr. 26	516	45	
aits Settlements:				
Penang	Oct. 6–12	1		
Singapore	Feb. 2–22	3		
eden:				
Stockholm	Feb. 2–8		1	
nis:				
Tunis	Apr. 26–May 1	1	1	
ion of South Africa:				
Cape Town	Aug. 1–30	1		
Do	Dec. 24–Jan. 31	1		
Johannesburg	Aug. 1–Oct. 31	12		Nov. 1–30: Cases, 4.
vessels:				
S. S. Euripides	Mar. 21	1		From England via Suez and Colombo. Case removed at Colombo. Vessel arrived Fremantle, Australia, Apr. 10.
S. S. Port Sydney	Mar. 18	1	1	From Egypt to Australia via Colombo. Arrived Fremantle Mar. 31.
S. S. Ulimaroa	Mar. 26	1		From Egypt via Colombo. Case developed after arrival at Colombo. Vessel arrived at Fremantle, Australia, Apr. 8.

TYPHUS FEVER.

ria:				
Algiers	Nov. 1–30	1		
tria				Dec. 1, 1918–Jan. 11, 1919: Cases, 125. Jan. 12–Mar. 15, 1919: Cases, 479.
Vienna	Dec. 1–Jan. 11	110		Occurring almost exclusively in repatriated soldiers and their contacts.
Do	Jan. 12–Mar. 15	410		
zil:				
Ceara	Sept. 14–21	1		
Rio de Janeiro	Dec. 15–22	2		
Do	Dec. 29–Feb. 22	29	3	
Sao Paulo	Jan. 13–19	3		
aria:				
Acteven	Mar. 10			Present.
Rustchuk	do			Do.
a:				
Antung	Dec. 2–15	2		
Do	Jan. 6–Apr. 20	3	1	
en (Korea):				
Fusan	Feb. 1–28	1	1	
Seoul	Jan. 1–Feb. 28	12	1	
mbia:				
Barranquilla	Nov. 8–Dec. 28		3	
Do	Jan. 5–Mar. 8	2	3	

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Germany:				
Breslau	Sept. 29–Oct. 19	12	8	
Gumbinnen district	Oct. 20–Nov. 7	1		
Dresden	do	1		
Griefswald	do	1		
Godullahutte	do	1		
Königsberg	Sept. 29–Oct. 19	3	1	
Königshutte	Oct. 20–Nov. 7	1	1	
Magdeburg	do	2		
Mostalten	Sept. 29–Oct. 19	7	2	District of Allens
Oppeln district	Oct. 20–Nov. 7	5		
Great Britain:				
Cork	Feb. 2–Mar. 22	4	1	
Glascow	Dec. 22–28	5		
Do	Jan. 5–Feb. 8	9	1	
Do	Mar. 9–15	1		
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29–Dec. 21		34	
Do	Dec. 29–Apr. 5		107	
Hungary				Sept. 9–Nov. 26. deaths, 8. Nov. 2, 1919: Cases, 47
Budapest	Sept. 3–Nov. 26	75	2	
Do	Jan. 13–Feb. 2	131	7	Nov. 27, 1918–Jan 159.
Debreczin	Jan. 20–Feb. 2	42		
Pressburg	Sept. 29–Nov. 6	11	1	
Szatmarnemeti	Nov. 4–26	1		Present in count
Tyrnau	do	1		
Italy:				
Arezzo Province	Apr. 7–13	4		At Arezzo.
Bari	Feb. 3–9	19		In soldiers retur
Belluno Province	Apr. 7–13	1		Sea.
Florence	do	21		
Leghorn	Apr. 14–27	9	2	
Naples	Feb. 3–May 11	9		
Novara Province	Apr. 7–13	1		
Taranto	Feb. 3–Apr. 13	4		
Udine Province	Apr. 7–13	13		At Cividale, 11 ca
Japan:				
Nagasaki	Nov. 10–Dec. 29	13	4	
Do	Dec. 30–Apr. 20	38	5	
Java:				
East Java				Oct. 7–21, 1918:
Surabaya	Oct. 7–21	4		
Mid-Java				Sept. 25–Oct. 16,
West Java				Oct. 2–23: Cases,
Batavia	Oct. 2–23	15	4	
Lithuania				Sept. 1–Oct. 26, deaths, 26.
Macedonia:				
Drama	Mar. 17			Present.
Epirus	Mar. 21			Do.
Kavala	Mar. 17	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5–Dec. 27	2		
Do	Dec. 28–Apr. 11	15	2	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 13, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Mexico:				
Aguascalientes	Feb. 2-23		3	
Do	Mar. 24-Apr. 13		4	
Guadalajara	Nov. 1-Dec. 31	4	1	
Do	Jan. 1-Apr. 30	9	5	
Mexico City	Sept. 22-Dec. 28	434		
Do	Dec. 29-May 3	644		
Netherlands:				
Amsterdam	Dec. 8-14	1		
Do	Jan. 12-Apr. 12	6		
Delft	Feb. 26			Present.
Harlem	do			Do.
Leiden	do			Do.
Limburg	do	5	1	Mining district.
Rotterdam	Feb. 2-Apr. 12	507	90	Jan. 30-Feb. 27, 1919: Cases, 462; deaths, 46.
Schiedam	Feb. 26			Present. Sept. 29-Oct. 26, 1918: Cases, 572; deaths, 50.
Poland:				
Lodz	Sept. 29-Oct. 26	55	8	
Warsaw	do	111	13	
Portugal:				
Braga	Mar. 24			
Oporto	Mar. 8-May 10	889		
Russia:				
Archangel	Jan. 15-Mar. 15	233	61	
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 30	43		
Do	Jan. 17-Mar. 15	143	15	
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Tunis:				
Tunis	Apr. 12-May 1	2	2	
Ukraine				Apr. 5, 1919: Reported to be spreading.
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Bahia	Jan. 12-Mar. 1	5	2	
Pernambuco	Oct. 1-Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29-Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1-30	1		
Do	Mar. 1-15	1		
Catarama	Feb. 1-15	1		
Chobo	Jan. 1-15	1		
Daule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-Mar. 15	5	1	
Guayaquil	July 1-Dec. 31	326	177	
Do	Jan. 1-Mar. 31	124	68	
Hacienda Vainilla	Feb. 16-28	1		
Milagro	Nov. 1-15	1		
Do	Feb. 1-Mar. 15	2	1	
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-Feb. 28	2	2	
Payo (Hacienda)	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
Vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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Atlantic City the following resolution was adopted by the Section on Preventive Medicine and Public Health:

Resolved, That the Section on Preventive Medicine and Public Health of the American Medical Association recommend to the House of Delegates that it ask the constituent associations to consider the advisability of such amendments to their by-laws and to those of this association as will eliminate from membership any physician who willfully fails or refuses to comply with local or State laws for the prevention of disease, including especially the provisions in such laws requiring the reporting of cases of communicable disease.

The enforcement of such an amendment to the by-laws as here proposed would be of incalculable value to the public health movement. It would make it possible to bring delinquent physicians before a court consisting entirely of their peers. This would make the American Medical Association insist that membership in the association depend on the faithful performance of the physician's duties not only to his patients, but to the public at large.

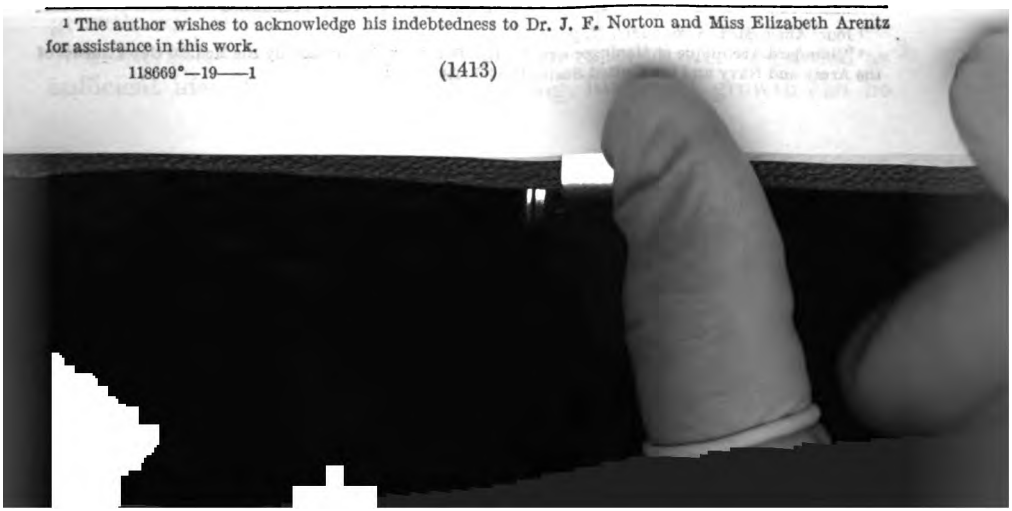
The association is to be congratulated on thus squarely accepting the responsibilities placed upon its members. Such cooperation is indeed appreciated by health administrators everywhere.

OBSERVATIONS ON THE BACTERIOLOGY OF INFLUENZA.[1]

By EDWIN O. JORDAN, Consultant in Bacteriology, United States Public Health Service.

These observations were made upon (A) patients affected in an epidemic in the Student Army Training Corps of the University of Chicago, (B) civilian influenza patients in various hospitals in the

[1] The author wishes to acknowledge his indebtedness to Dr. J. F. Norton and Miss Elizabeth Arentz for assistance in this work.



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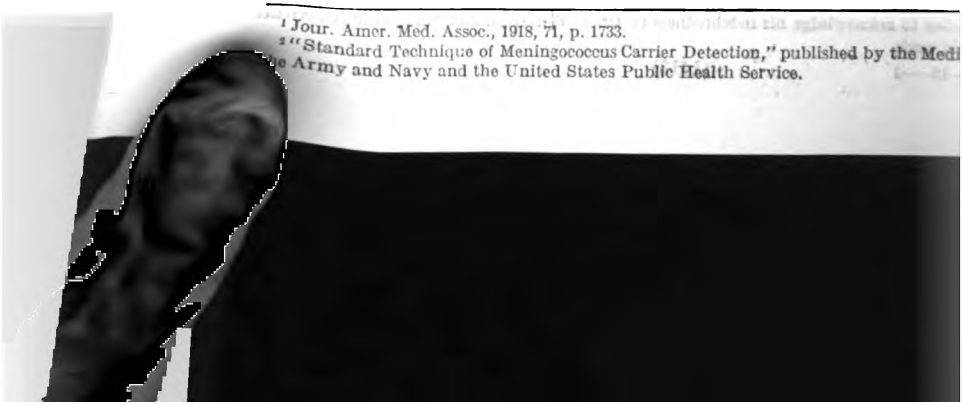
frequency and abundance of the Pfeiffer bacillus in the ratory tract of persons suffering from influenza and fr nonspecific respiratory tract infections. Another was similar observations upon the diplo-streptococcus d Mathers.[1] Variations in the nose and throat flora thr illness of one and the same individual were also particula

Methods.—In the majority of cases swabs were made fr tonsils, and nasopharynx; the nasopharynx swabs were the Mathers bent-wire method as used in meningoc work.[2] Nasal swabs usually failed to give results mate ent from the others and in the later cases were omitted.

As soon as made, the swab was smeared on freshly p blood agar plates, which were kept warm en route to th The meat infusion agar was prepared with 2 per cent made neutral to phenolphthalein; it has proved well ad growth of pure cultures of the Pfeiffer bacillus. Huma sheep blood (5 per cent) were chiefly used; no material d noted. From the smear, radiating streaks were made wit loop [2] and crossed after burning off the needle. W colonies are usually obtained in this way. It has bee vantageous to have plates poured on the day they are most not more than 24 hours before use. Special care keep the air of the incubator moist. If the surface of th when inoculated, or if the air of the incubator is not suffic growth of the Pfeiffer bacillus may be unfavorably af plates were examined after 24 hours and again after 48 h lens was always used. In the present series particular a paid to the occurrence of the Pfeiffer bacillus and the gree streptococcus isolated by Mathers.[1] Other bacteria, whe noteworthy numbers, were also isolated and examined. several colonies from each plate were circled and fished wit loop to a fresh plate; if this second plate was a pure culture

[1] Jour. Amer. Med. Assoc., 1918, 71, p. 1733.
[2] "Standard Technique of Meningococcus Carrier Detection," published by the Medi e Army and Navy and the United States Public Health Service.



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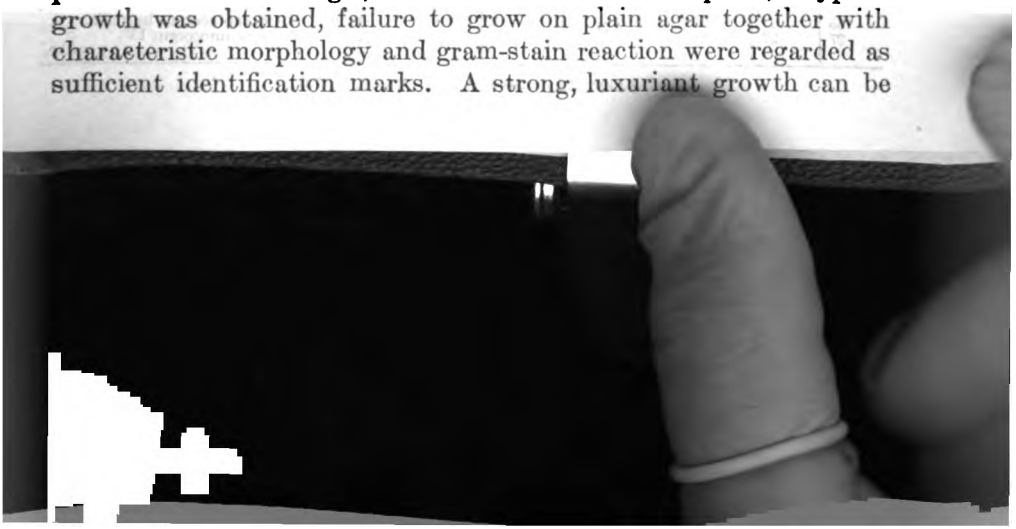
portance in the successful isolation of the Pfeiffer bacillus, particularly when this organism is present in small numbers: First, the incubation of the plates for two or three days; second, the use of the hand lens.

Sputum was examined when it was possible to obtain it. Direct stains were made and also smears on blood-agar plates in the usual way. When, as is often the case in uncomplicated influenza, sputum in washable quantity was unobtainable, we had the patient cough directly upon a blood-agar plate. Little flakes of mucus were sometimes discharged, and after 18–24 hours the growth surrounding these mucous droplets was transferred with a loop to a fresh plate. In this way the Pfeiffer bacillus has been isolated several times when the other sources of examination failed to yield it.

Blood cultures.—Blood drawn from the elbow vein (about 10 cc in each case) was added to warm broth (200 to 500 cc) and incubated for about a week. The observations comprised 11 cases of uncomplicated influenza and 8 of influenza-pneumonia. In the plain influenza cases blood was drawn on the first day in 2 cases, on the second day in 5, and in 1 case each on the third, fourth, fifth, and seventh days. In the pneumonia following influenza the blood cultures were made, respectively, on the fourth (2), fifth (1), sixth (1), seventh (2), eighth (1), and twelfth (1) days. All were sterile.

The Pfeiffer bacillus.—The small, translucent colonies on blood agar can often be identified with a high degree of certainty with the hand lens, particularly if they are numerous, in which case the heaping-up around large colonies of staphylococci and other bacteria is highly characteristic. For definite identification it has been our practice to transfer single, isolated colonies to a fresh plate; if typical growth was obtained, failure to grow on plain agar together with characteristic morphology and gram-stain reaction were regarded as sufficient identification marks. A strong, luxuriant growth can be



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obtained on agar prepared with heated blood, but except for obtaining large quantities of material for inoculation experiments this medium presents no noteworthy advantages over the ordinary clear medium. It is not particularly well adapted for isolation.

It is of interest that a medium made without meat infusion, meat extract, or peptone—simple agar dissolved in physiological salt solution—to which 5 per cent of blood is added in the usual way—yields a scanty, but undoubted growth of the Pfeiffer bacillus.

For preserving cultures it is safest to make daily transfers, though if the air of the incubator is kept moist the Pfeiffer bacillus can retain its vitality for a considerable period in the incubator. We have frequently obtained growth from tube cultures that had been in the incubator for from two to three weeks. The heated blood medium is better than the ordinary blood medium for maintaining vitality.

The Mathers coccus.—This organism was isolated by the late Capt. Mathers during the influenza epidemic in September, 1918, at Camp Meade. A culture kindly furnished me by Miss Tunnicliff possessed the characters described in her paper.[1] It resembles the ordinary mouth streptococcus in some of its characters, but the colonies on blood agar are much like those of the pneumococcus, although, as a rule, larger, moister, and more confluent. It is gram-positive, usually with pointed ends and in pairs. It is not soluble in bile, and most strains ferment neither inulin nor mannite. Morphologically and in colony growth it is closer to the pneumococcus than to the streptococcus, but the fermentation characters are those of the ordinary mouth streptococci.

A coccus with these characters was found in a large percentage of the cases examined, not infrequently in practically pure culture, especially in cultures from nasopharyngeal swabs. One hundred and eight strains obtained at different times from 44 different cases were subjected to careful examination. All were gram-positive, had the morphology described above, and gave a heavy, moist, green, confluent growth on blood agar. Table I shows their close relationship to strains of *Streptococcus buccalis* (Blake's classification), isolated in this same series of cases, although in morphology and in appearance of the growth on blood agar the difference is sharp.

TABLE I.

Number of strains.	Bile solubility.		Fermentation.						Remarks.
			Lactose.		Inulin.		Mannite.		
	+	−	+	−	+	−	+	−	
108	.....	108	105	3	4	104	5	103	Mathers coccus.
85	.....	64	84	1	2	62	1	63	Streptococcus buccalis
27	27	.....	27	.....	22	5	22	5	Pneumococcus IV

[1] Jour. Amer. Med. Assoc., 1918, 71, p. 1788.

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TABLE II.

CASE 21 (Influenza-pneumonia).

Day of disease.	Temperature.	Leucocyte count.	Pfeiffer bacillus.	Mathers coccus.	Other bacteria.	Remarks.
Second	103	7,300	−	+	Pneumococcus IV, M. catarrhalis.	M. catarrhalis more abundant than any other on these dates.
Third	102	5,500	−	+	M. catarrhalis	
Fourth	103	5,000	−	−	do	
Fifth	103	3,700	−	−	Many diphtheroids	
Seventh	104.2	4,600	−	−	Many staphylococci	
Eighth	104	4,200	−	−	Many diphtheroids and streptococci.	
Ninth	103.2	6,200	−	−	Many staphylococci	Almost pure culture of staphylococci in nasopharynx. This is rather unusual.
Fifteenth	100.4	9,900	+	−	S. buccalis (Pfeiffer bacillus very abundant).	
Eighteenth	99.4	14,400	+	+	Some diphtheroids	
Twenty-first	98.4	14,200	+	+	S. buccalis	
Twenty-sixth	98	[1] 12,900	+	−	do	
Thirty-seventh.	98	7,800	−	−	Streptococcus buccalis; M. catarrhalis.	

CASE 24 (Uncomplicated influenza).

First	102		−	−	Staphylococci	
Second	102	6,000	−	−	Diphtheroids	
Third	100.6	5,400	−	−	Diphtheroids; M. catarrhalis.	
Fifth	99		+	−	M. catarrhalis	
Sixth	99	8,000	+	−	B. mucosus capsulatus	
Eighth. Discharged.						

CASE 66 (Uncomplicated Influenza).

First	103	4,900	−	+	A few S. buccalis	Almost pure culture Mathers coccus.
Second	100		−	+	do	
Third	100		−	+	Staphylococci	Mathers coccus not nearly so abundant as on preceding days.
Fifth	97.6		+	+	Many staphylococci	Few if any bacteria besides Pfeiffer bacillus and Mathers coccus.
Seventh	97	[2] 7,460	+	+		
Ninth	97	7,300	+	+		Mathers coccus abundant.
Fourteenth. Discharged.						

[1] Twenty-fourth. [2] Sixth.

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In all, 47 cases of influenza were studied in this way. The distribution of the Pfeiffer bacillus and the Mathers coccus was as follows:

TABLE III.

Group.	Number of cases examined.	Number in which Pfeiffer bacillus was found.	Number in which Mathers coccus was found.
A1. Uncomplicated influenza, October	11	8	4
A2. Influenza-pneumonia, October	8	3	4
(Groups A1 and A2 in same epidemic.)			
B. Hospital influenza and influenza-pneumonia	17	11	4
C. Uncomplicated influenza, December–February	11	8	1
Total	47	30	13

Arrangement in such a numerical table has its limitations and does not give a complete picture of the findings, since most of the cases in Groups A1, A2, and C were examined many times, while nearly all of those in Group B were examined only once. Groups A1 and A2 are fairly comparable with one another in respect to the number of observations in each case, and so far as the examination of this limited number of cases from one localized epidemic is concerned, there is no doubt that Pfeiffer bacilli occurred more frequently and more abundantly in the uncomplicated influenza cases than in those in which pneumonia developed.

Comparison of the tabular record for Groups A1 and C, on the other hand, might be misleading, since the Pfeiffer bacillus was present in much larger numbers in the December–February cases (Group C) than in the October cases (Group A1). Whereas in the earlier cases Pfeiffer bacillus colonies were relatively infrequent compared with the numbers of other bacteria, in the later cases there were many plates in which the Pfeiffer bacillus and the Mathers coccus were practically the only organisms present. Considering the number of colonies of Pfeiffer bacillus on each plate and the proportion of daily observations that were positive, the actual abundance of this organism in the upper respiratory tract was far greater in the later cases than in the cases observed during the height of the epidemic in Chicago. The contrast between the cases in Group B and those in Groups A1 and A2 (Table III) was even more pronounced. Although the total of examinations in the hospital cases was much smaller, the Pfeiffer bacillus was present in a relatively high proportion of the plates examined and usually in great numbers. The significance of relative abundance as disclosed by plate culture is somewhat problematical and the bearing of such facts upon the rôle of the Pfeiffer bacillus must be regarded for the present as quite uncertain.

In 18 cases in which the Pfeiffer bacillus was found, examinations made on the first to the third day of the disease showed this organism present in 8, the Mathers coccus in 11 cases; in 7 cases neither of these

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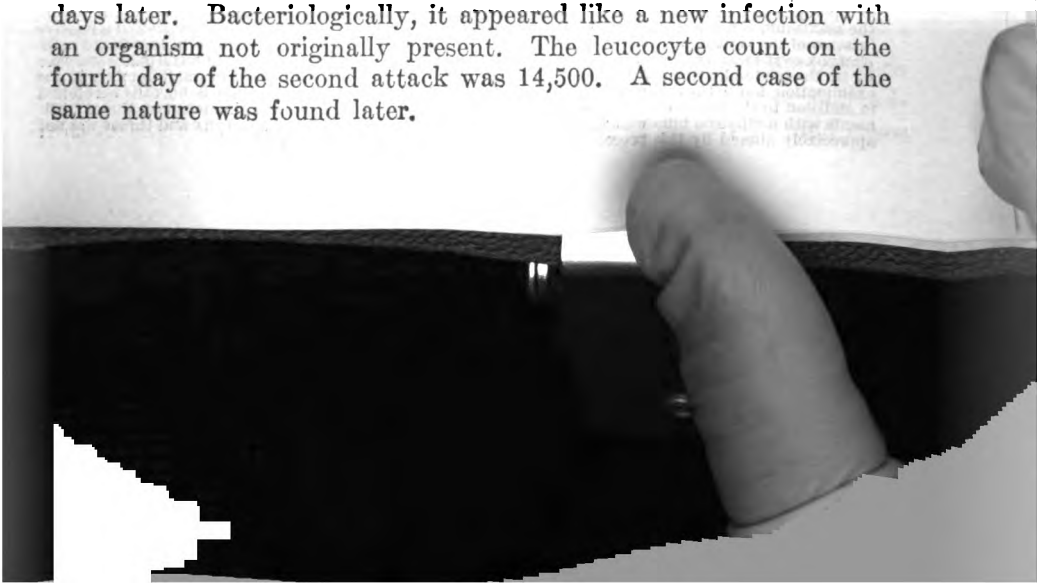
all the earlier cases. *M. catarrhalis* was also very commonly present, often in great numbers. (See Table II, case 21.) *S. buccalis* occurred in varying numbers, but was rarely very abundant. In many of the Section B cases in October a large gram-negative diplococcus was present which formed very delicate, translucent colonies and died out readily even when transferred frequently on blood-agar. It grew in the first generation very scantily on plain agar and since it did not ferment dextrose it is perhaps to be regarded as belonging to the *M. catarrhalis* group, although under the conditions of our work it proved a much less vigorous organism than *M. catarrhalis* or than the Pfeiffer bacillus.

Pneumococci were found in 10 cases, but several strains were irregular in respect to inulin and mannite fermentations. All but one (IIa) fell in Group IV on application of the agglutination test.

The Friedländer bacillus was found in 4 cases, in one of these in large numbers.

Hemolytic streptococci were found in 7 cases, all but one of these in the later stages of the epidemic; in 5 cases they were numerous. In one patient no hemolytic streptococci were observed during the primary attack (3 sets of examinations). Twelve days after recovery and discharge, the patient was readmitted with a temperature of 104° and subjective symptoms described as being very similar to those of the original attack; hemolytic streptococci were present in practically pure culture in the throat and nasopharynx. This second attack or relapse was of short duration and the patient was discharged five days later. Bacteriologically, it appeared like a new infection with an organism not originally present. The leucocyte count on the fourth day of the second attack was 14,500. A second case of the same nature was found later.



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The Friedländer bacillus was found once

catarrhalis was found several times, though not in large

Observations on these cases were made in precisely the ner as that of the observations upon the influenza cas records in Table IV may be compared with the influenz Table II.

TABLE IV.

CASE 100 (Common cold).

Day of disease.	Temperature.	Leucocyte count.	Pfeiffer bacillus.	Mathers coccus.	Other bacteria.
Second	104	8,900	—	—	M. catarrhalis
Sixth	101.6	8,100	—	—	Hemolytic streptococci
Seventh	102	7,800	+	—	S. buccalis

CASE 101 (Severe cold, sore throat).

Third	102	10,500	—	—	M. catarrhalis
Fifth	100	8,100	+	+	
Sixth	99	7,900	+	+	Pneumococcus IV
Seventh		6,000	—	+	
Eighth		5 400	—	+	S. buccalis
Thirteenth	100	10,200	—	—	do
Fourteenth	99	7,600	—	+	do

CASE 103.

First	98	12,900	—	+	Pneumococcus IV, S. buccalis.
Second	98		—	+	Pneumococcus IV, S. buccalis, M. catarrhalis.
Fourth	98	10,300	—	+	do
Fifth	98	7,800	—	+	S. buccalis, M. catarrhalis.
Seventh	98	6,600	—	+	Pneumococcus IV, S. buccalis, M. catarrhalis.

CASE 111[1] (Tonsillitis).

Second	102	9,700	—	+	Hemolytic Streptococci.
Fourth		13,400	—	+	S. buccalis

[1] Case 111 was one of 4 cases of tonsillitis developing at the same time, and all with a h at a party 18–24 hours before attack. All 4 cases showed leucocytosis during the first 4 the maximum ranging from 13,400 in one case to 20,800 in another. Three of the cases increase of the neutrophils (82 to 86 per cent). The bacteriological picture as shown i pharynx swabs was remarkably similar. Hemolytic streptococci were very abundant on by far the predominating organisms. In one case pneumococcus IV was present in sm examination, but in the other only a few colonies of the Mathers streptococcus and of S. b in addition to the hemolytic streptococci. Between the first and second examination ments with methylene blue were given, but the character of the flora of nasopharynx a appreciably altered by this procedure.

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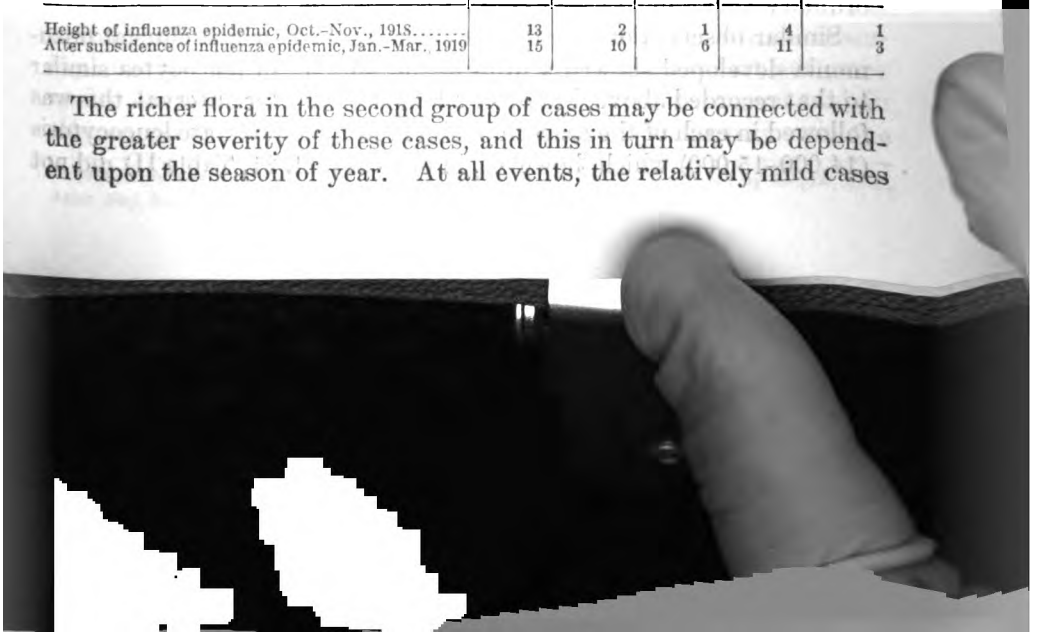
in the majority of cases of true influenza. In this case (107) the leucocytes were: Third day, 6,700; fourth, 4,500; fifth, 5,200; seventh, 5,100. The symptoms were not unambiguous: Headache, pain in back, no sore throat, no cough, no nosebleed. The temperature was not high (second day, 101.8) and quickly subsided (third day, 98.6) and none of the symptoms was severe. The predominating organism on the third, fourth, and fifth days was the Mathers coccus, although some pneumococci Type IV were found on the fourth and fifth days. On the seventh day many Friedländer bacilli were found. This case may have been one of light influenza, but there were no other cases in the neighborhood or among the associates of (107) at this time (Feb. 2–8, 1919).

In comparing the October–November cases of cold with those in January–March the most conspicuous difference was the much larger number of cases with hemolytic streptococci and with pneumococci (Type IV) in the latter group.

TABLE V.—*Bacteria in cases of cold, etc.*

	Number of cases.	Hemolytic Streptococci.	Pneumococcus IV.	Mathers coccus.	Pfeiffer bacillus.
Height of influenza epidemic, Oct.–Nov., 1918.....	13	2	1	4	1
After subsidence of influenza epidemic, Jan.–Mar., 1919	15	10	6	11	3

The richer flora in the second group of cases may be connected with the greater severity of these cases, and this in turn may be dependent upon the season of year. At all events, the relatively mild cases



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of common respiratory tract infection that were examined during the height of the influenza epidemic did not harbor the Pfeiffer bacillus in nearly as high proportion as did the influenza cases examined at the same time; neither did they, except in a few cases, harbor in abundance hemolytic streptococci, pneumococci, or the Mathers coccus. In several cases the only organism growing in any considerable numbers on blood agar plates was the common mouth streptococcus (*S. buccalis*).

The association of large numbers of hemolytic streptococci (var. Beta) with cases of tonsillitis, and generally with cases of severe throat inflammation, was markedly evident in this series. This corresponds with the relative scarcity of this organism in the cases of true influenza, in which as a rule sore throat was not observed.

Leucocyte counts.—In the course of these observations leucocyte counts were made, as a rule, on the same days when throat swabs were taken. The average counts in simple influenza showed a leucopenia, as recorded in Table VI. The term "simple influenza" is here used to designate those cases not showing signs of clinical pneumonia. The patients usually regained a normal condition by the end of the first week, although with the ordinary aftermath of weakness.

TABLE VI.—*Leucocyte counts—simple influenza.*

Days of disease.	Cases.	Total leucocytes.	Polymorphonuclears. Per cent.	Lymphocytes. Per cent.	Large mononuclears and transitionals. Per cent.
Second and third	13	6,100	63	26	8
Fourth and Fifth	9	4,900	62	33	1
Sixth and seventh	6	6,100	59	32	9
Eighth to twelfth	10	7,500	66	26	7
Twelfth to thirtieth (after full recovery and discharge)	8	9,100	60	34	6

Eosinophiles were generally absent during the attack.

Individual cases sometimes showed considerable deviation from the average. In one case the lowest count (4,300) was not reached until the eighth day of the disease. Several cases without any apparent complication gave leucocyte counts of over 10,000 for a week or more after seemingly complete recovery. In general, the counts ran rather high for some time after the patient was able to return to his ordinary vocation.

Similar observations on the influenza cases in which clinical pneumonia developed showed a drop in the number of leucocytes similar to that recorded above, but after a longer or shorter interval this was followed in each of the cases here observed by a moderate leucocytosis (14,000–15,000) which, however, in one case (cf. 21, Table II) did not

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appear until about the fifteenth day. The differential ratio was not appreciably altered in these cases. Quite different is the normal leucocyte count in ordinary colds, tonsillar inflammations, etc.

TABLE VII.—*Leucocyte counts—colds, etc.*

Days of disease.	Cases.	Total leucocytes.	Polymorphonuclears.	Lymphocytes.	Large mononuclears and transitionals.
			Per cent.	*Per cent.*	*Per cent.*
First, second, and third	22	12,600	73	22	5
Fourth and fifth	8	11,600	74	20	6
Sixth and seventh	7	8,800	69	25	6
Eighth to fourteenth	3	7,200	68	25	7

Comparison with Table VI brings out very plainly the average differences in total leucocyte counts. Whether the slight divergences in the differential count that appear in these figures have significance will need a larger number of observations to determine. As already stated, several cases have been observed in the course of this study which, clinically, seemed more like colds than like true influenza, but which had a low leucocyte count throughout. In the absence of any definite diagnostic criterion the relationship of these infections to true influenza must remain uncertain.

Summary.

The bacteriological picture in influenza is not a uniform one so far as nose and throat flora are concerned. The ordinary methods of cultivation with blood agar plates show marked differences in individual cases. Groups of individuals who have been in more or less intimate contact with one another may harbor very similar assemblages of microorganisms, but differ from other groups examined at the same time. The variations in respiratory tract flora reported by many observers during the progress of an influenza epidemic are doubtless, in part, group differences.

Daily examinations of a number of selected typical cases, mild and severe, have shown no one organism constantly demonstrable in large numbers by the methods employed. The two organisms most commonly and abundantly present in this series were the Pfeiffer bacillus and the diplococcus or streptococcus found by others at Camp Meade.[1]

The Pfeiffer bacillus was found in 64 per cent of the influenza cases examined between October, 1918, and February, 1919. It was present in much larger numbers in the throats of the patients examined toward the end of the outbreak. Several cases did not come under observation until clinical pneumonia had developed and in these cases the Pfeiffer bacillus was not found as frequently as in the

[1] This is apparently very similar to, if not identical with, the organism described by Zingher, Jour. Amer. Med. Assoc., 1919, 72, p. 1020.

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"uncomplicated" cases. Other cases for various reasons could be examined only once or twice, and the findings are not strictly comparable with those in which daily examinations were carried out. The percentage of positive findings would probably have increased if all patients had been subjected to examination throughout the course of the attack. The relative abundance of the Pfeiffer bacillus varied greatly. In some cases it was the predominant organism; in others only a few colonies could be found, no more than in normal throats. It did not often happen in this series that hemolytic streptococci (var. Beta) and the Pfeiffer bacillus were both present in large numbers. On the other hand the Pfeiffer bacillus and the Mathers coccus often had the field almost to themselves. In a few cases the Pfeiffer bacillus was present in such overwhelming numbers in cultures from nose, nasopharynx, and throat, that participation in a pathologic process was strongly suggested. These cases, however, did not differ clinically in any appreciable way from other cases in which the Pfeiffer bacillus was found scantily.

The Mathers coccus was found about as frequently and abundantly as the Pfeiffer bacillus, although its occurrence was quite independent of that of the latter. Its association with the pneumonia cases seemed to be closer than that of the Pfeiffer bacillus, but it was also found in all the later cases of simple influenza. Variations in the abundance of this organism were quite as marked as were those of the Pfeiffer bacillus and no relation could be demonstrated between these findings and the characters of the cases. Practically pure cultures of the Mathers coccus were obtained from the nasopharynx of some patients.

Comparison of the true influenza cases with colds and tonsillar infections showed that the general leucopenia of the influenza cases could be contrasted with the general leucocytosis of the others. Blood counts made during the first four or five days of the attack practically invariably showed at some time a leucopenia in the influenza cases and a leucocytosis in the others. The chief differences in the bacterial findings were the relative infrequency of the Pfeiffer bacillus in the colds, etc. (14 per cent), and the relatively high proportion of hemolytic streptococci (var. Beta). The Mathers coccus was present in about the same proportion of cases as in influenza.

The pneumococcus was found in about 20 per cent of the influenza cases (10: 47) and in a slightly larger proportion in the cases of rhinitis and tonsillitis (7: 28). No special search was made for these organisms, and it is probable that positive findings would have been increased somewhat if mouse inoculation could have been made whenever throat swabs were taken. Washed sputum, when procurable, was inoculated into mice, but the pneumococcus was not invariably isolated. In two cases as much as 2 cubic centimeters of

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at least in some cases, a new infection with another organism.

The observations carried out by the aerobic blood agar plate method and recorded in this paper have not shown the predominance or constant presence of any one organism in the upper respiratory tract of influenza patients. The Pfeiffer bacillus, however, has been more conspicuous than any other organism, particularly in comparison with its relative infrequency in cases of rhinitis and tonsillitis examined during the same epidemic period.

POPULAR LEAFLETS ON BABY HYGIENE.

In a recent number of the Public Health Reports attention was called to the importance of health activities during the neonatal period. It is well known that the hot weather regularly brings with it an increase in mortality in this important age period. In an effort to assist State and local health officers in the educational work required to combat excessive infant mortality the Public Health Service has prepared a number of bulletins intended for popular instruction. These are available in quantity for free distribution by health officers. Requests, stating the quantity desired, should be addressed to the Surgeon General, United States Public Health Service, Washington, D. C.

Fly poster—How the fly spreads disease.

The Care of the Baby. Supplement No. 10 to Public Health Reports.

The Summer Care of Infants. Supplement No. 16 to Public Health Reports.

The Transmission of Disease by Flies. Supplement No. 29 to Public Health Reports.

Safe Milk. Supplement No. 31 to Public Health Reports.

Safe Milk for the Small Town. Reprint No. 497 from Public Health Reports.

The Homemade Milk Refrigerator. Public Health Bulletin No. 102.

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BIRTH STATISTICS AND INFANT MORTALITY.

PRELIMINARY REPORT OF THE BUREAU OF THE CENSUS FOR 1917.

In the birth-registration area of the United States 1,353,792 infants were born alive in 1917, representing a birth rate of 24.6 per 1,000 of population. The total number of deaths in the same area was 776,222, or 14.1 per 1,000. The births exceeded the deaths by 74.4 per cent. For every State in the registration area, for practically all the cities, and for nearly all the counties, the births exceeded the deaths, in most cases by considerable proportions. The mortality rate for infants under 1 year of age averaged 93.8 per 1,000 living births.

The birth-registration area, established in 1915, has grown rapidly. It comprised, in 1917, the six New England States, Indiana, Kansas, Kentucky, Maryland, Michigan, Minnesota, New York, North Carolina, Ohio, Pennsylvania, Utah, Virginia, Washington, Wisconsin, and the District of Columbia, and had an estimated population of 55,000,000, or about 53 per cent of the estimated total population of the United States in that year.

Comparison with 1916.

The birth rate for the entire birth-registration area fell below that for 1916 by two-tenths of 1 per 1,000 population; but the death rate was less by six-tenths of 1 per 1,000 than in 1916. Thus, the excess of the birth rate over the death rate for 1917, which amounted to 10.5 per 1,000, was somewhat greater than the corresponding excess for 1916, 10.1 per 1,000, although it fell slightly below that for 1915, 10.9 per 1,000. If the birth and death rates prevailing in any one of these three years were to remain unchanged, and if no migration were to take place to or from the area to which they relate, the population of the area would increase at the rate of slighly more than 1 per cent per annum, or a little more than 10 per cent in a decade. This would be about half the rate—21 per cent—by which the entire population of the United States increased between 1900 and 1910.

White and colored.

Of the total number of births reported, 1,280,288, or 24.5 per 1,000, were of white infants, and 73,504, or 25.8 per 1,000, were of colored infants. The death rates for the two elements of the population were 13.7 and 22.5 per 1,000, respectively.

Infant mortality.

The infant mortality rate—that is, the number of deaths of infants under 1 year of age per 1,000 born alive—throughout the birth-registration area as a whole was 93.8 in 1917, as against 101 in 1916 and 100 in 1915. This is equivalent to saying that in 1915 and 1916 of every 10 infants born alive 1 died before reaching the age of 1 year,

Plural births.

The reports from the registration area show the birth of 14,394 pairs of twins and 155 sets of triplets in 1917—in all, 29,253 infants, or a little more than 2 per cent of the total number born.

Number of children per family.

The reports for 1,241,722 of the births occurring in 1917 contained information as to number of child in order of birth. Of these reports, 339,042 were for the first child born to the mother, 264,044 for the scond child, 191,528 for the third, 134,331 for the fourth, and 95,931 for the fifth. In the remaining 216,846 cases, or 17.5 per cent of the entire number for which information upon this point was obtained, the total number of children borne by the mother was 6 or more; in 37,914 cases it was 10 or more; in 1,600 cases, 15 or more; in 56 cases, 20 or more; and in 1 case, that of a colored woman, the birth of a twenty-fifth child was reported.

The total number of children borne by the mothers who gave birth to these 1,241,722 infants in 1917, in whose cases data were available as to previous births, was 4,093,908. The reports for 1,194,621 of the births occurring in 1917 contained information as to the entire number of children borne by the mothers and still living, and gave a total of 3,443,466, or an average of very nearly 3 living children in each family in which a birth took place in 1917.

States and cities.

The following table shows, for the birth-registration area, by States and by cities having more than 100,000 population in 1910, the number of births in 1917, the percentage of excess of births over deaths, and the infant mortality rate. The figures for the white and colored elements of the population are shown separately for those areas in which colored persons constituted more than one-tenth of the total population.

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Births, excess of births over deaths, and infant mortality, 1917.

Area.	Number of births.	Excess of births over deaths.	Deaths of infants under 1 year of age per 1,000 live births.
		Per cent.	
Registration area, total	1,353,792	74.4	[illegible]
White	1,280,288	78.8	[illegible]
Colored	73,504	14.9	[illegible]
Registration States.			
Connecticut	37,461	[illegible]	[illegible]
Indiana	63,144	58.9	[illegible]
Kansas	58,604	87.0	[illegible]
Kentucky	61,698	[illegible]	[illegible]
Maine	16,653	42.7	[illegible]
Maryland	33,963	44.9	[illegible]
White	27,519	60.1	[illegible]
Colored	6,444	3.1	[illegible]
Massachusetts	95,673	[illegible]	[illegible]
Michigan	89,159	[illegible]	[illegible]
Minnesota	54,796	120.1	[illegible]
New Hampshire	9,569	[illegible]	[illegible]
New York	246,919	[illegible]	[illegible]
North Carolina	76,290	134.6	[illegible]
White	52,850	158.2	[illegible]
Colored	23,440	73.6	[illegible]
Ohio	120,949	[illegible]	[illegible]
Pennsylvania	222,505	71.6	[illegible]
Rhode Island	15,296	[illegible]	[illegible]
Utah	13,670	195.3	[illegible]
Vermont	7,553	[illegible]	[illegible]
Virginia	69,751	[illegible]	[illegible]
White	41,924	122.7	[illegible]
Colored	18,829	[illegible]	[illegible]
Washington	23,464	[illegible]	[illegible]
Wisconsin	39,134	101.0	[illegible]
Registration cities having more than 100,000 inhabitants in 1910.			
Connecticut:			
Bridgeport	5,109	[illegible]	[illegible]
New Haven	5,161	[illegible]	[illegible]
District of Columbia:			
Washington	7,463	[illegible]	[illegible]
White	5,250	[illegible]	[illegible]
Colored	2,215	[illegible]	[illegible]
Indiana:			
Indianapolis	5,963	[illegible]	[illegible]
Kentucky:			
Louisville	4,112	[illegible]	[illegible]
White	3,593	[illegible]	[illegible]
Colored	519	[illegible]	[illegible]
Maryland:			
Baltimore	13,040	[illegible]	[illegible]
White	12,645	[illegible]	[illegible]
Colored	2,395	[illegible]	[illegible]
Massachusetts:			
Boston	19,877	[illegible]	[illegible]
Cambridge	2,783	[illegible]	[illegible]
Fall River	3,807	[illegible]	[illegible]
Lowell	3,249	[illegible]	[illegible]
Worcester	5,286	[illegible]	[illegible]
Michigan:			
Detroit	26,798	[illegible]	[illegible]
Grand Rapids	3,051	[illegible]	[illegible]
Minnesota:			
Minneapolis	8,675	[illegible]	[illegible]
St. Paul	5,151	[illegible]	[illegible]
New York:			
Albany	2,259	[illegible]	[illegible]
Buffalo	13,497	[illegible]	[illegible]
New York	141,234	[illegible]	[illegible]
Rochester	6,933	[illegible]	[illegible]
Syracuse	4,199	[illegible]	[illegible]
Ohio:			
Cincinnati	7,817	[illegible]	[illegible]
Cleveland	20,274	[illegible]	[illegible]
Columbus	4,308	[illegible]	[illegible]
Dayton	3,311	[illegible]	[illegible]
Toledo	5,084	[illegible]	[illegible]

[1] Percentage by which births fell below deaths.

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SALE OF INFECTED MEAT CAUSING TRICHINOSIS.

PENNSYLVANIA COURT HOLDS THAT DEALER IS NOT LIABLE WHERE NEGLIGENCE IS NOT SHOWN.

That a dealer is not liable for selling meat infected with trichinæ, and which caused illness, when there was no negligence in such sale, is the decision in a Pennsylvania case.[1]

In an action to recover damages for illness resulting from eating pork infected with trichinæ, the defendant offered evidence showing that "parasites, known as trichinæ, are invisible to the naked eye and can be discovered only by microscopic inspection; that such inspection is untrustworthy and does not in all cases give assurance that the particular meat inspected and approved is free from parasites; that no system of inspection is known to science by which the presence of trichinæ can be detected with certainty in all cases; and that the only sure method of eliminating the danger is to thoroughly cook the meat at a temperature of at least 140°, whereby the harmful parasites are destroyed and the meat rendered wholesome and fit for food." Defendant also showed that "for the reasons above stated, the United States Government concluded an attempt to inspect all pork for trichinæ would result in more danger to the public than no inspection, for the reason [that] knowledge on the part of the public that an inspection had been made would lead to a false sense of security and induce consumers to omit taking proper precautions to avoid danger by thoroughly cooking."

It was shown, too, that other packing establishments made no inspection for trichinæ.

The court held that there had been no negligence on the part of the dealer.

[1] Tavani *v.* Swift & Co., 105 Atl., 55.

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SALE OF CONDENSED MILK.

UNITED STATES SUPREME COURT DECISION UNDER OHIO LAW.

An Ohio statute prohibited the sale of condensed milk unless made from pure unskimmed milk. The United States Supreme Court has decided [1] that this law prohibits the sale of an article consisting of condensed skimmed milk and a vegetable fat, although not sold as condensed milk.

DEATHS DURING WEEK ENDED JUNE 14, 1919, IN CITIES.

The table following shows the registered deaths from all causes and from pneumonia (all forms) and influenza combined in certain large cities of the United States during the week ended June 14, 1919.

The data are taken from the "Weekly Health Index," June 17, 1919, issued by the Bureau of the Census, Department of Commerce.

Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended June 14, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years. [2]	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Albany, N. Y.	112,565	37	17.1	C. 19.9		
Atlanta, Ga.	201,732	63	16.3	C. 14.2		
Baltimore, Md.	[3] 669,981	165	12.8	A. 16.1		
Birmingham, Ala.	197,670	49	12.9	A. 18.0		
Boston, Mass.	785,245	169	11.2	A. 15.1	6	[illegible]
Buffalo, N. Y.	473,229	120	13.2	C. 13.6		
Cambridge, Mass.	111,432	24	11.2	A. 12.4		
Chicago, Ill.	2,596,681	622	12.5	A. 13.0	50	1.0
Cincinnati, Ohio.	418,022	109	13.6	C. 15.3		
Cleveland, Ohio.	810,306	140	9.0	C. 9.6	13	.8
Columbus, Ohio.	225,296	56	13.0	C. 13.2	2	.5
Dayton, Ohio.	130,655	18	7.2	C. 8.4	0	—
Denver, Colo.		60				
Fall River, Mass.	128,392	28	11.4	C. 10.2		
Grand Rapids, Mich.	135,450	24	9.2	C. 11.9		
Indianapolis, Ind.	300,389	74	13.3	C. 12.4		
Kansas City, Mo.	313,785	92	15.3	C. 16.0	7	1.2
Los Angeles, Calif.	568,495	99	9.1	A. 12.9	6	.6
Louisville, Ky.	242,707	55	11.8	C. 12.7	2	.8
Lowell, Mass.	109,081	18	8.6	A. 14.6		
Memphis, Tenn.	154,759	66	22.2	C. 18.2	1	.3
Milwaukee, Wis.	453,481	91	10.5	A. 11.2	5	.6
Minneapolis, Minn.	383,442	71	9.7	C. 12.2		
Nashville, Tenn.	119,215	44	19.2	C. 22.7		
Newark, N. J.	428,684	62	7.5	C. 11.9		
New Haven, Conn.	154,865	39	13.1	C. 15.2		
New Orleans, La.	382,273	130	17.7	A. 19.6		
New York, N. Y.	5,215,879	1,121	11.3	C. 11.6		
Oakland, Calif.	214,206	39	9.5	A. 11.1		
Philadelphia, Pa.	1,761,371	409	12.1	[4] 14.3		

[1] Hebe Co. et al. v. Shaw, Secretary of Agriculture of Ohio, et al., 39 Sup. Ct., 126.

[2] "A" indicates that the rate given is the average annual death rate per 1,000 population for the corresponding week of the years 1913 to 1917, inclusive. "C" indicates that the rate is the annual death rate per 1,000 population for the corresponding week of 1918.

[3] Population estimated as of July 1, 1919.

[4] Rate is based on statistics of 1915, 1916, and 1917.

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Registered deaths and annual death rates per 1,000 population in certain large cities of the United States, week ended June 14, 1919—Deaths from all causes, and from pneumonia (all forms) and influenza combined—Continued.

City.	Population July 1, 1918, estimated.	Total deaths, all causes.	Annual death rate per 1,000.	Annual death rate for preceding years.	Influenza and pneumonia (all forms).	
					Number of deaths.	Annual death rate per 1,000.
Pittsburgh, Pa	593,303	160	14.1	C. 11.8	22	1.9
Portland, Oreg	.....	53	.....	.....	5	.....
Providence, R. I	263,613	39	7.7	C. 9.5	5	1.0
Richmond, Va	160,719	45	14.6	C. 19.5	1	.3
Rochester, N. Y	264,856	53	10.4	C. 10.8	1	.2
St. Louis, Mo	779,951	186	12.4	C. 11.4	.....	.....
St. Paul, Minn	257,699	58	11.7	C. 8.5	.....	.....
San Francisco, Calif	478,530	150	16.3	C. 14.7	17	1.9
Seattle, Wash	.....	62	.....	.....	6	.....
Spokane, Wash	.....	22	.....	.....	.....	.....
Syracuse, N. Y	161,404	35	11.3	C. 12.0	1	.3
Toledo, Ohio	262,234	48	9.5	A. 13.6	.....	.....
Washington, D. C	401,681	86	11.2	A. 13.9	9	1.2
Worcester, Mass	173,650	46	13.8	C. 13.5	.....	.....

Summary of information received by telegraph from industrial insurance companies for week ended June 14, 1919.

Policies in force	39,337,515
Number of deaths	7,991
Number of deaths per 1,000 policies in force, annual rate	10.6

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PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

EXTRA-CANTONMENT ZONES—CASES REPORTED WEEK ENDED JUNE 21.

CAMP DIX ZONE, N. J.

No cases of communicable diseases reported.

FAYETTEVILLE SANITARY DISTRICT, N. C.

	Cases.
Gonorrhea	6
Syphilis	3
Typhoid fever	1
Vincent's angina	1

GAS AND FLAME SCHOOL ZONE, GA. AND ALA.

Chancroid:	
Alabama	1
Muscogee County	1
Chicken pox:	
Columbus	1
Gonorrhea:	
Columbus	6
Muscogee County	5
Bibb City	1
Influenza:	
Columbus	1
Malaria:	
Columbus	2
Muscogee County	2
Girard	1
Measles:	
Columbus	1
Muscogee County	1
Bibb City	1
Pellagra:	
Muscogee County	1
Pneumonia:	
Muscogee County	1
Phoenix City	1
Smallpox:	
Columbus	1
Syphilis:	
Columbus	11
Camp Benning	1
Girard	1
Typhoid fever:	
Columbus	1
Whooping cough:	
Muscogee County	2

CAMP GORDON ZONE, GA.

Atlanta:	
Chancroid	2
Chicken pox	1
Gonorrhea	9
Measles	6

CAMP GORDON ZONE, GA.—continued.

Atlanta—Continued.	Cases.
Scarlet fever	1
Smallpox	9
Tuberculosis	4
Typhoid fever	1
Whooping cough	2

GULFPORT HEALTH DISTRICT, MISS.

Chancroid:	
Pascagoula	1
Dysentery:	
De Lisle	1
Lyman	1
Gonorrhea:	
Gulfport	2
Long Beach	1
Moss Point	1
Pascagoula	2
Hookworm:	
Gulfport	2
Long Beach	1
Malaria:	
Biloxi	1
Escatawpa	4
Fernwood	1
Gulfport	14
Helena	1
Kiln	3
Kreole	1
Lyman	2
Mississippi City	2
Moss Point	3
Nugent	1
Ocean Springs	1
Pascagoula	1
Measles:	
Moss Point	1
Pascagoula	3
Mumps:	
Ansley	1
Biloxi	4
Gulfport	3
Kiln	1
Moss Point	1
Pellagra:	
Gulfport	1
Lyman	1
Pneumonia:	
Biloxi	1

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GULFPORT HEALTH DISTRICT, MISS.—contd.

	Cases.
Scarlet fever:	
Kiln	2
Tuberculosis:	
Biloxi	1
Long Beach	1
Typhoid fever:	
Kiln	1
Whooping cough:	
De Lisle	1
Gulfport	2
Hovey	1
Ocean Springs	5

CAMP JACKSON ZONE, S. C.

Columbia:	
Chicken pox	8
Smallpox	1
Tuberculosis	2
Typhoid fever	1
Whooping cough	6
Government clinic:	
Gonorrhea	13
Syphilis	8

CAMP LEE ZONE, VA.

Petersburg:	
Gonorrhea	3
Gonorrheal ophthalmia	1
Tuberculosis	2
Typhoid fever	3

CAMP MERRITT ZONE, N. J.

Englewood:	
Chicken pox	1
Diphtheria	1

PICRIC ACID PLANT ZONE, GA.

Brunswick:	
Gonorrhea	4
Pellagra	1
Syphilis	2
Tuberculosis	1
Typhoid fever	3

CAMP POLK ZONE, N. C.

Chancroid:	
Durham	1
Chicken pox:	
Raleigh	1
Gonorrhea:	
Durham	2
Raleigh	2
Poliomyelitis:	
Raleigh	1
Smallpox:	
Wake Forest Township	3
Syphilis:	
Durham	1
Tuberculosis:	
Raleigh	1
Typhoid fever:	
Durham	1
White Oak Township	1
Whooping cough:	
Durham	10

PORTSMOUTH AND NORFOLK COUNTY HEALTH DISTRICT, VA.

	Cases.
Chicken pox:	
Portsmouth	2
Norfolk	1
Diphtheria:	
Portsmouth	2
Gonorrhea:	
Norfolk County	1
Measles:	
Portsmouth	1
Norfolk	1
Scarlet fever:	
Norfolk	2
Portsmouth	1
Smallpox:	
Norfolk County	1
Norfolk	1
Portsmouth	1
Tuberculosis:	
Norfolk County	1
Portsmouth	1
Typhoid fever:	
Norfolk County	2
Portsmouth	3

CAMP SHERMAN ZONE, OHIO.

Government clinic:	
Gonorrhea	1
Syphilis	1
Scioto Township:	
Scarlet fever	1

SOUTHER FIELD ZONE, GA.

Chicken pox	1
Malaria (outside controlled area)	6
Tuberculosis, pulmonary	1

CAMP TRAVIS ZONE, TEX.

San Antonio:	
Chicken pox	1
Diphtheria	2
Gonorrhea	12
Influenza	1
Malaria	2
Measles	1
Tuberculosis	3

CAMP UPTON ZONE, N. Y.

Brook Haven:	
Measles	1
Pneumonia	2
Riverhead:	
German measles	1

WILMINGTON SANITARY DISTRICT, N. C.

Castle-Hayne:	
Typhoid fever	1
Wilmington:	
Diphtheria	1
Gonorrhea	7
Malaria	2
Measles	1
Mumps	1
Pellagra	1
Scarlet fever	1
Syphilis	3
Tuberculosis	4
Typhoid fever	1
Whooping cough	2

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DISEASE CONDITIONS AMONG TROOPS IN THE UNITED STATES.

The following data are taken from telegraphic reports received in the office of the Surgeon General of the United States Army for the week ended June 13, 1919. Reports from the American Expeditionary Forces are delayed in transmission, and the "current week" for troops in the American Expeditionary Forces is not the same period as "current week" for troops in the United States.

	Current week.	Last week.
Annual admission rate per 1,000 (all causes)	445.20	[illegible]
All troops in United States	1,284.82	[illegible]
American Expeditionary Forces	310.45	[illegible]
Annual admission rate per 1,000 (disease only)	344.76	[illegible]
All troops in United States	1,088.28	[illegible]
American Expeditionary Forces	224.76	[illegible]
Noneffective per 1,000 on day of report	21.69	[illegible]
All troops in United States [1]	52.53	[illegible]
American Expeditionary Forces	19.88	[illegible]
Annual death rate per 1,000 (all causes)	7.69	[illegible]
All troops in United States [1]	11.80	[illegible]
American Expeditionary Forces	3.54	[illegible]
Annual death rate per 1,000 (disease only)	5.23	[illegible]
All troops in United States [1]	9.86	[illegible]
American Expeditionary Forces	2.52	[illegible]

[1] Sick and death rates among troops in the United States will continue to be relatively high, as the numerical strength of troops in the United States continues to decline from week to week as a result of demobilization. Well men only are eligible for discharge, while the sick and otherwise disabled are retained in service for further treatment. The continued influx of sick and wounded (property chargeable to commands overseas) is another factor tending to increase rates in the United States and to diminish correspondingly similar rates overseas.

Cases of special diseases reported during the week ended June 13, 1919.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases. Total.	Venereal diseases. New infections.	Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
Benning				7	6					[illegible]	[illegible]
Bowie			1	8	2					[illegible]	[illegible]
Bragg										[illegible]	[illegible]
Custer	1			6	5		1			[illegible]	[illegible]
Devens				12		2			1	[illegible]	[illegible]
Dix	5			40						[illegible]	[illegible]
Dodge				11	2		2	1		[illegible]	[illegible]
Funston				13			1			[illegible]	[illegible]
Gordon				25		1				[illegible]	[illegible]
Grant	1			36	1					[illegible]	[illegible]
Humphreys				1						[illegible]	[illegible]
Jackson				34						[illegible]	[illegible]
Kearny							1			[illegible]	[illegible]
Henry Knox	1			2						[illegible]	[illegible]
Lee			1	23	8					[illegible]	[illegible]
Lewis				8	3					[illegible]	[illegible]
Meade	1			12	7					[illegible]	[illegible]
Pike	1		1	13	2		2			[illegible]	[illegible]
Shelby	1		2	6						[illegible]	[illegible]
Sherman				21						[illegible]	[illegible]
Taylor				1						[illegible]	[illegible]
Travis				5	5					[illegible]	[illegible]
Upton	2			20	2					[illegible]	[illegible]
Holabird				2	1					[illegible]	[illegible]
Northeastern Department	1			7	3	5	1			[illegible]	[illegible]
Eastern Department				9	4					[illegible]	[illegible]
Southeastern Department			1	8	1					[illegible]	[illegible]
Central Department	1			5						[illegible]	[illegible]
Southern Department		1	2	37	5	20				[illegible]	[illegible]
Western Department				21	13					[illegible]	[illegible]
Aviation camps				11			1			[illegible]	[illegible]
Port of embarkation:											
Hoboken	7			22		3	5	1	1	[illegible]	[illegible]
Newport News	17			71	10	64				[illegible]	[illegible]

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Cases of special diseases reported during the week ended June 13, 1919—Continued.

Camp.	Pneumonia.	Dysentery.	Malaria.	Venereal diseases.		Influenza.	Measles.	Meningitis.	Scarlet fever.	Annual admission rate per 1,000 (disease only).	Noneffective per 1,000 on day of report.
				Total.	New infections.						
Fort Monroe	.....	.....	.....	3	.....	.....	.....	.....	.....	542.76	20.53
Alcatraz disciplinary barracks	.....	.....	.....	.....	.....	.....	.....	.....	.....	771.51	17.80
Leavenworth disciplinary barracks	.....	.....	.....	.....	.....	.....	.....	.....	.....	707.83	43.16
Columbus Barracks	.....	.....	.....	3	1	.....	.....	.....	.....	736.28	30.03
Jefferson Barracks	.....	.....	.....	2	2	.....	.....	.....	1	4,635.95	15.30
Fort Logan	.....	.....	.....	8	8	1	.....	.....	.....	1,857.14	45.91
Fort McDowell	.....	.....	.....	8	.....	.....	.....	.....	.....	1,259.51	38.06
Fort Sill	.....	.....	.....	7	1	.....	.....	.....	.....	390.87	21.29
Fort Slocum	.....	.....	.....	1	1	.....	.....	.....	.....	920.35	29.27
Fort Thomas	.....	.....	.....	3	1	.....	.....	.....	.....	840.79	41.04
West Point	.....	.....	.....	2	.....	.....	.....	.....	.....	480.59	12.98
Arsenals	.....	.....	.....	5	.....	.....	.....	.....	.....	604.65	31.67
Miscellaneous small stations	.....	.....	.....	8	4	.....	.....	.....	.....	541.04	25.63
Total	39	1	8	547	98	96	14	2	3	1,091.26	52.53

Number of deaths at large camps in United States, week ended June 13, 1919.

Camp.	Strength.	Deaths.		Camp.	Strength.	Deaths.	
		All causes.	Disease only.			All causes.	Disease only.
Benning	1,615	0	.....	Sherman	8,553	1	1
Bowie	3,824	0	.....	Taylor	6,991	0	.....
Bragg	657	0	.....	Travis	2,247	0	.....
Custer	2,981	0	.....	Upton	10,364	0	.....
Devens	13,016	4	0	Northeastern Department	2,801	0	.....
Dix	17,894	0	.....	Eastern Department	11,295	0	.....
Dodge	5,553	3	3	Southeastern Department	3,528	1	1
Funston	4,320	0	.....	Central Department	3,076	0	.....
Gordon	4,062	0	.....	Southern Department	29,035	4	1
Grant	8,013	1	1	Western Department	8,634	1	1
Humphreys	1,880	0	.....	Aviation camps	14,597	0	.....
Jackson	4,019	0	.....	Port of embarkation:			
Kearny	1,566	1	0	Hoboken	35,468	16	16
Henry Knox	9,087	1	1	Newport News	26,569	0	.....
Lee	9,107	1	1	All others	79,464	41	38
Lewis	3,173	1	1	Total	347,977	79	66
Meade	7,927	3	1				
Pike	3,445	0	.....				
Polabird	515	0	.....				
Shelby	2,698	0	.....				

Annual admission rate per 1,000 for certain diseases.

Disease.	Troops in United States.		American Expeditionary Forces.	
	Current week.	Last week.	Current week.	Last week.
Pneumonia	5.82	10.20	4.52	3.50
Dysentery	.14	.00	.15	.28
Malaria	1.19	.80	.39	.77
Venereal	81.75	69.18	57.48	57.30
Paratyphoid	.00	.00	.07	.00
Typhoid	.59	.00	.00	.28
Measles	2.09	.67	1.56	1.19
Meningitis	.29	.26	.54	.84
Scarlet fever	.44	1.61	.39	.35
Influenza	14.34	16.11	.....	.....

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PNEUMONIA.

Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.		Cases.
Gas and Flame school zone, Ga. and Ala	2	Camp Upton zone, N. Y.	3
Gulfport health district, Miss	1		

City Reports for Week Ended June 7, 1919.

Place.	Lobar.		All forms.		Place.	Lobar.		All forms.	
	Cases.	Deaths.	Cases.	Deaths.		Cases.	Deaths.	Cases.	Deaths.
Akron, Ohio	3				Lynn, Mass	2	1		
Anniston, Ala	2				Manchester, N. H	1	1		
Appleton, Wis			1	1	Morgantown, W. Va	1			
Atlanta, Ga	1	5			Mount Vernon, N. Y	4	1		
Baltimore, Md	9	6			Natick, Mass	1			
Bellaire, Ohio	1				Newark, N. J	22	3		
Belleville, N. J	1				New Bedford, Mass	1	2		
Benton Harbor, Mich	1				Newburgh, N. Y	1	1		
Bloomfield, N. J			1		Newburyport, Mass	1	1		
Boston, Mass	26	16			New Orleans, La	1	3		
Cambridge, Mass	6	2			Newport, Ky	1	1		
Camden, N. J	1				Newton, Mass	1			
Chicago, Ill			162	49	New York, N. Y			29	[illegible]
Cleveland, Ohio	11	8			North Adams, Mass	2	1		
Columbus, Ga	1	1			Northampton, Mass	2			
Corpus Christi, Tex	1				Philadelphia, Pa	28	29		
Dayton, Ohio	3	3			Pittsfield, Mass	1	1		
Detroit, Mich	4	10	7	14	Pontiac, Mich	1			
Duluth, Minn	2				Rochester, N. Y	3	1		
Easthampton, Mass			1		Rome, N. Y	2			
Elmira, N. Y	1				San Antonio, Tex	2	2		
Fall River, Mass	3	1			Sandusky, Ohio			1	
Fitchburg, Mass	1	1			San Francisco, Calif	11	5		
Hackensack, N. J			1		Santa Barbara, Calif	1			
Hoquiam, Wash	1				Saugus, Mass			1	1
Jamestown, N. Y			5		Sault Ste. Marie, Mich	1			
Janesville, Wis	1	1			Schenectady, N. Y	1			
Kansas City, Kans	1				Somerville, Mass	3	1		
Kansas City, Mo			2	5	Springfield, Mass	1	1		
Lackawanna, N. Y	2				Trenton, N. J	1			
Little Rock, Ark	1	1			Waco, Tex			1	
Los Angeles, Calif	3	2	3	3	Winston-Salem, N. C	2	1		
Louisville, Ky	1	6			Worcester, Mass	1	3		
Lowell, Mass	3								

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for April and May, 1919.

Place.	New cases reported.	Place.	New cases reported.
Florida (May):		New Jersey (May):	
Pensacola	1	Bergen County	1
Illinois (May):		Hudson County	2
Cook County—		Morris County	1
Chicago	12	Total	4
Chicago Heights	1		
Total	13	New York (April):	
Louisiana (May):		Broome County—	
Richland Parish	1	Union (town)	1
St. Landry Parish	1	Dutchess County—	
Total	2	Poughkeepsie (town)	1
Michigan (May):		Herkimer County—	
Berrien County—		Herkimer	1
Sodus Township	1	Westchester County—	
Three Oaks Township	1	North Tarrytown	1
Total	2	New York City	2
		Total	4

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POLIOMYELITIS (INFANTILE PARALYSIS)—Continued.

State Reports for April and May, 1919—Continued.

Place.	New cases reported.	Place.	New cases reported.
w York (May):		West Virginia (May):	
Dutchess County—		Logan County	2
Poughkeepsie	1	Wood County	3
Orange County—		Wyoming County	4
Middletown	1		
Schenectady County—		Total	9
Princetown (town)	1		
Suffolk County—		Wisconsin (May):	
Brookhaven (town)	1	Kenosha County	1
New York City	3	Milwaukee County	1
Total	7	Total	2
ode Island (May):			
East Providence	1		

City Reports for Week Ended June 7, 1919.

Place.	Cases.	Deaths.	Place.	Cases.	Deaths.
efield, W. Va	1		New Orleans, La	1	
ago, Ill		1	Washington, Pa	1	

RABIES IN ANIMALS.

La Crosse, Wis., Lawrence, Kans., Rochester, N. Y.

During the week ended June 7, 1919, cases of rabies in animals re reported as follows: La Crosse, Wis., 1; Lawrence, Kans., 2; chester, N. Y., 1.

SCARLET FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.		Cases.
p Gordon zone, Ga	1	Camp Sherman zone, Ohio	1
port health district, Miss	2	Wilmington sanitary district, N. C	1
smouth and Norfolk County health district, Va	3		

ee also Diphtheria, measles, scarlet fever, and tuberculosis, page 1452.

SMALLPOX.

Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.		Cases.
and Flame school zone, Ga. and Ala	1	Camp Polk zone, N. C	3
p Gordon zone, Ga	9	Portsmouth and Norfolk County health district, Va	4
p Jackson zone, S. C	1		

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Shiawassee County—						
Byron	1				1	
Laingsburg	6		1		5	
New Haven Township	1				1	
Perry	1				1	
Woodhull Township	1				1	
St. Clair County—						
Mussey Township	1		1			
Washtenaw County—						
Ann Arbor	2				2	
Wayne County—						
Detroit	19		1		15	3
Highland Park	1		1			
Total	339		19	28	280	12
New Jersey (May):						
Atlantic County	1				1	
Burlington County	17			3	14	
Camden County	3				3	
Cape May County	6			1	5	
Essex County	1				1	
Total	28			4	24	
New York (April):						
Delaware County—						
Franklin (town)	1				1	
Erie County—						
Buffalo	3					3
Amherst (town)	1				1	
North Collins (town)	12			1	11	
Monroe County—						
Rochester	1				1	
Otsego County—						
Schenevus	1				1	
New York City	8					8
Total	27			1	15	11
New York (May):						
Chemung County—						
Elmira Heights	1				1	
Erie County—						
North Collins (town)	11			1	9	1
North Collins	3			1	2	
Niagara County—						
Niagara Falls	1				1	
Orange County—						
Blooming Grove (town)	1				1	

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Total	28		1	3	2
Wisconsin (May):					
Adams County	1				
Ashland County	1				
Barron County	16		6	5	
Brown County	4			4	
Chippewa County	14		1		
Clark County	10		2	2	
Columbia County	2				
Dane County	6		4		
Douglas County	14		6	4	
Eau Claire County	4				
Fond du Lac County	6				
Grant County	2		2		
Green County	4				
Green Lake County	8		2	3	
Jefferson County	2				
Kenosha County	2				
La Crosse County	2				
Manitowoc County	6				
Marinette County	11			2	
Milwaukee County	58				
Monroe County	1		1		
Outagamie County	4		1		
Portage County	5				
Price County	3				
Racine County	33		33		
Rock County	2				
Taylor County	14				
Waukesha County	1				
Waupaca County	9				
Winnebago County	62		13	15	1
Wood County	4				
Total	311		71	35	8

State Reports for May, 1919.

Place.	Cases.	Deaths.	Place.	Case
Illinois:			Illinois—Continued.	
Adams County—			Cook County—	
Lima Township	1		Chicago	
Alexander County—			Chicago Heights	
Tamms	4		Dupage County—	
Bond County—			York Township	
Burgess Township	1		Fayette County—	
Cass County—			Avena Township	
Beardstown	1		Hurricane Township	
Champaign County—			Fulton County—	
Champaign	5		Canton	
Ogden Township	1		Canton Township	
Sadoms Township	1		Greene County—	
Urbana	1		Walkerville Township	
Urbana Township	2		Hamilton County—	
Christian County—			McLeansboro	
Stonington	1			

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Elkhart Township	1	
Macon County—		
Decatur	2	
Macoupin County—		
Sawyerville	28	
Madison County—		
East Alton	12	
Granite City	15	
Marion County—		
Odin	1	
Salem	1	
Mason County—		
Havana	3	
Mason City	1	
McHenry County—		
Woodstock	2	
McLean County—		
Bloomington	9	
Menard County—		
Athens	2	
Mercer County—		
Aledo	7	
Greene Township	1	
Preemption Township	4	
Seaton	4	
Morgan County—		
Jacksonville	3	
Meredosia	1	
Ogle County—		
Lynnville Township	4	
Rochelle	1	
Peoria County—		
Averyville	2	
Hollis Township	1	
Kingston Mines	1	
Peoria	42	
Pulaski County—		
Allin Precinct	17	
Randolph County—		
Percy	1	
Richland County—		
Decker Township	8	
Noble Township	1	
Rock Island County—		
Coal Valley	1	
East Moline	1	
Rock Island	71	
Rural Township	1	
Sangamon County—		
Auburn Township	1	
Springfield	1	
St. Clair County—		
Belleville	1	
Lebanon	1	
Maunie	--	
Norris City	22	
Whiteside County—		
Erie	3	
Sterling	3	
Will County—		
Joliet	4	
Joliet Township	1	
Williamson County—		
Johnston City	1	
Winnebago County—		
Rockport	4	
Woodford County—		
El Paso	1	
Total	554	
Louisiana:		
Acadia Parish	4	
Allen Parish	17	
Ascension Parish	1	
Assumption Parish	4	
Avoyelles Parish	1	
Beauregard Parish	2	
Bienville Parish	3	
Bossier Parish	1	
Caddo Parish	14	
Calcasieu Parish	10	
East Baton Rouge Parish	14	
Evangeline Parish	1	
Iberia Parish	5	
Iberville Parish	2	
Jackson Parish	1	
Jefferson Parish	1	
Jefferson Davis Parish	2	
Lafayette Parish	2	
Orleans Parish	20	
Rapides Parish	6	
Richland Parish	3	
St. Martin Parish	1	
St. Mary Parish	9	
Tangipahoa Parish	1	
Vermilion Parish	4	
Winn Parish	2	
Total	131	
Rhode Island:		
Providence	1	
West Virginia:		
Barbour County	1	
Boone County	1	

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City Reports for Week Ended June 7, 1919.

Place.	Cases.	Deaths.	Place.	Cases.
Aberdeen, Wash	1		Los Angeles, Calif	
Abilene, Tex	2		Louisville, Ky	
Akron, Ohio	1		Madison, Wis	
Alliance, Ohio	6		Marinette, Wis	
Atlanta, Ga	17		Marshalltown, Iowa	
Austin, Tex	1		Milwaukee, Wis	
Battle Creek, Mich	1		Minneapolis, Minn	
Birmingham, Ala	5		Moline, Ill	
Bluefield, W. Va	4		Morgantown, W. Va	
Boise, Idaho	1		Muskogee, Okla	
Boston, Mass	1		Newport News, Va	
Boulder, Colo	4		New Orleans, La	
Butte, Mont	1		Norfolk, Va	
Cedar Rapids, Iowa	13		Norwood, Ohio	
Chanute, Kans	6		Oakland, Calif	
Charlotte, N. C	1		Oklahoma City, Okla	
Cheyenne, Wyo	3		Omaha, Nebr	
Chicago, Ill	2		Parsons, Kans	
Cincinnati, Ohio	6		Pekin, Ill	
Cleveland, Ohio	11		Peoria, Ill	
Colorado Springs, Colo	4		Pocatello, Idaho	
Columbia, S. C	4		Pontiac, Mich	
Columbus, Ga	3		Portland, Oreg	
Connellsville, Pa	1		Portsmouth, Ohio	
Council Bluffs, Iowa	1		Racine, Wis	
Dallas, Tex	10		Roanoke, Va	
Danville, Ill	1		Rockford, Ill	
Davenport, Iowa	15		Rock Island, Ill	
Denver, Colo	7		St. Joseph, Mo	
Detroit, Mich	10		St. Louis, Mo	
Duluth, Minn	6		St. Paul, Minn	
Durham, N. C	1		Salem, Oreg	
Everett, Wash	8		Salt Lake City, Utah	
Farrell, Pa	1		San Diego, Calif	
Fond du Lac, Wis	2		San Francisco, Calif	
Fort Wayne, Ind	3		San Jose, Calif	
Fort Worth, Tex	5		Seattle, Wash	
Framingham, Mass	1		Sioux City, Iowa	
Galesburg, Ill	3		South Bend, Ind	
Grand Rapids, Mich	1		Spartanburg, S. C	
Great Falls, Mont	5		Spokane, Wash	
Hoquiam, Wash	3		Springfield, Ohio	
Houston, Tex	1		Stillwater, Minn	
Hutchinson, Kans	1		Superior, Wis	
Indianapolis, Ind	4		Tacoma, Wash	
Kalamazoo, Mich	1		Tiffin, Ohio	
Kansas City, Kans	2		Topeka, Kans	
Kansas City, Mo	4		Tulsa, Okla	
Knoxville, Tenn	1		Utica, N. Y	
Kokomo, Ind	2		Walla Walla, Wash	
Lafayette, Ind	4		Washington, D. C	
Lexington, Ky	1		Wichita, Kans	
Lincoln, Nebr	12		Winston-Salem, N. C	
Little Rock, Ark	2		Yakima, Wash	
Logansport, Ind	11		Youngstown, Ohio	1
Long Beach, Calif	3			

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TUBERCULOSIS.

Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.
Camp Gordon zone, Ga.	4
Gulfport health district, Miss.	2
Camp Jackson zone, S. C.	2
Camp Lee zone, Va.	2
Picric Acid plant zone, Ga.	1
Camp Polk zone, N. C.	1
Portsmouth and Norfolk County health district, Va.	2
Souther Field zone, Ga.	1
Camp Travis zone, Tex.	3
Wilmington sanitary district, N. C.	4

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1452.

TYPHOID FEVER.

Cases Reported in Extra-Cantonment Zones, Week Ended June 21, 1919.

	Cases.
Fayetteville sanitary district, N. C.	1
Gas and Flame school zone, Ga. and Ala.	1
Camp Gordon zone, Ga.	1
Gulfport health district, Miss.	1
Camp Jackson zone, S. C.	1
Camp Lee zone, Va.	3
Picric Acid plant zone, Ga.	3
Camp Polk zone, N. C.	2
Portsmouth and Norfolk County health district, Va.	5
Wilmington sanitary district, N. C.	2

State Reports for April and May, 1919.

Place.	New cases reported.
Connecticut (May):	
Fairfield County—	
Bridgeport	1
Danbury	2
Norwalk	3
Shelton	3
Hartford County—	
Manchester	1
Litchfield County—	
Barkhamsted	1
Morris	1
Middlesex County—	
Saybrook	1
New Haven County—	
Meriden	1
New Haven	9
Orange	9
Waterbury	2
Connecticut (May)—Continued.	
New London County—	
New London	2
Waterford	1
Total	1
	29
Florida (May):	
Alachua County	1
Bradford County	1
Citrus County	1
Duval County—	
Jacksonville	8
Escambia County	3
Pensacola	1
Gadsden County	3
Hillsborough County	1
Tampa	4

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Covington, Ky.	2				
Dallas, Tex.	2				
Dedham, Mass.	1		Richmond,		
Detroit, Mich.	7	4	Roanoke, Va.		
Durham, N. C.	2		Sacramento, Calif.		
Elmira, N. Y.	1		Salt Lake City, Utah		
Everett, Wash.	1		Sanford, Me.		
Fairmont, W. Va.	3		San Francisco, Calif.		
Fall River, Mass.	1		Saratoga Springs, N. Y.		
Fort Worth, Tex.	1	1	Saugus, Mass.		
Framingham, Mass.	1		Savannah, Ga.		
Great Falls, Mont.	1		Spartanburg, S. C.		
Hartford, Conn.	1		Spokane, Wash.		
Highland Park, Mich.	1		Steelton, Pa.		
Houston, Tex.	1		Toledo, Ohio.		
Ironton, Ohio.	1		Trenton, N. J.		
Kansas City, Kans.	1		Troy, N. Y.		
Kansas City, Mo.	1	3	Tulsa, Okla.		
Kenosha, Wis.	2		Tuscaloosa, Ala.		
Kokomo, Ind.	2		Waco, Tex.		
Lancaster, Pa.	1		Wheeling, W. Va.		
Lawrence, Mass.	2		Wilmington, Del.		
Lima, Ohio.	1		Wilmington, N. C.		
Logansport, Ind.		1	Winston-Salem, N. C.		

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCUL

State Reports for April and May, 1919.

State.	Cases repo	
	Diph-theria.	Measles
Connecticut (May)	180	87
Florida (May)	17	6
Illinois (May)	668	5,20
Louisiana (May)	40	5
Michigan (May)	554	83
New Jersey (May)	566	76
New York (April)	2,082	2,05
New York (May)	2,287	3,03
Rhode Island (May)	53	1
West Virginia (May)	51	41
Wisconsin (May)	147	68

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Ann Arbor, Mich	15,041	13	1		1		1			
Anniston, Ala	14,326								2	
Ansonia, Conn	16,954	2								
Appleton, Wis	18,005	5								
Arlington, Mass	13,073	1					1		1	
Asbury Park, N. J	14,629	5			19					
Asheville, N. C	25,656	9					1			5
Ashtabula, Ohio	22,008	4	1				3			1
Atlanta, Ga	196,144	69	2		11		4		2	5
Atlantic City, N. J	59,515	5	1		6		1		6	
Attleboro, Mass	19,776	2					1		1	
Auburn, N. Y	37,823	9								
Austin, Tex	35,612	9					2			3
Bakersfield, Calif	17,543	10								
Baltimore, Md	584,637	220	21	2	24		112	1	25	19
Barre, Vt	12,401	4								
Baton Rouge, La	17,544	4			3				2	
Battle Creek, Mich	30,159		3		20					
Bayonne, N. J	72,204		4		2		1		7	
Beatrice, Nebr	10,437	3								
Beaumont, Tex	28,851	7								
Beaver Falls, Pa	13,749				1		1			
Bedford, Ind	10,613						1			
Bellaire, Ohio	14,575	6								
Belleville, N. J	12,797		4							
Beloit, Wis	18,547	5	1		3		1		2	
Benton Harbor, Mich	11,099	1			2		2			
Berkeley, Calif	60,487	10	3	1						
Berlin, N. H	13,892	3								
Bethlehem, Pa	14,353		4		48					
Beverly, Mass	22,128	8								
Biddeford, Me	17,700	6								
Billings, Mont	15,123	4	1		1		3			
Binghamton, N. Y	54,864	23	1				3		1	1
Birmingham, Ala	189,716	64			10		3	1	5	6
Boise, Idaho	35,951	9					2			
Boston, Mass	767,813	232	51	2	34		48		54	18
Boulder, Colo	12,012						1			
Braddock, Pa	22,060				1		1		2	
Bradford, Pa	[1] 14,544				2					
Brazil, Ind	10,472	2			2					1
Bridgeport, Conn	124,724	26	3	1	2		2	1		3
Bristol, Conn	16,318	1	1							
Brockton, Mass	69,152	6	1				3		1	
Brookline, Mass	33,526	11	1		2				1	
Brunswick, Ga	10,964	2							3	
Buffalo, N. Y	475,781	142	49	4	86		25		28	12
Burlington, Iowa	25,144	6					2		1	1
Burlington, Vt	21,892	10	1							1
Butler, Pa	28,677		3		1					
Butte, Mont	44,057						1		2	
Cairo, Ill	15,995	7	2							1
Cambridge, Mass	114,293	34	6		10				9	3
Camden, N. J	108,117		3				3		3	
Canton, Ill	13,674	4								
Canton, Ohio	62,566	9			6					
Cape Girardeau, Mo	11,146		2				1			
Carlisle, Pa	10,795				19					
Cedar Rapids, Iowa	38,033		1							
Centralia, Ill	11,838	2			2		1			
Chambersburg, Pa	12,475				1		2			
Champaign, Ill	15,052	3								1
Chanute, Kans	12,968	2								
Charleston, S. C	61,041	23								3

[1] Population Apr. 15, 1910.

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Coatesville, Pa	14,998				1			
Coffeyville, Kans	18,331				1			
Cohoes, N. Y	25,292	7	1				1	
Colorado Springs, Colo	38,965	7						
Columbus, Ga	26,306	13			19		1	
Columbus, Ohio	220,135	63			16		3	
Concord, N. H	22,858	7					1	
Connellsville, Pa	15,876							
Council Bluffs, Iowa	31,838	4			3			
Covington, Ky	59,623	15	2		1		4	
Cranston, R. I	26,773	8						
Cumberland, Md	26,686	2	1		12		2	
Dallas, Tex	129,788	46	2		2			
Danbury, Conn	22,931						2	
Danvers, Mass	10,037		1					
Danville, Ill	32,969	1	1		3			
Davenport, Iowa	49,618		1					
Dayton, Ohio	128,939	33			16			
Dedham, Mass	10,618	1						
Denver, Colo	268,439	64	9	1	22		6	
Detroit, Mich	619,648	197	43	2	149		52	
Dover, N. H	13,276	5						
Du Bois, Pa	14,994				1		5	
Dubuque, Iowa	40,096		2					
Duluth, Minn	97,077	12	2		49	1		
Dunmore, Pa	21,286		2				1	
Durham, N. C	26,160	6						
East Chicago, Ind	30,286	7						
East Cleveland, Ohio	13,864				3			
Easton, Pa	30,854		1		2			
East Orange, N. J	43,761	8	2		2		1	
East Providence, R. I	18,485				1		1	
Eau Claire, Wis	18,887				11		2	
Elgin, Ill	28,562	7	1		7		1	
Elizabeth, N. J	88,830		3	1			6	
Elmira, N. Y	38,272	12	2		2			
El Paso, Tex	69,149	37					4	
Englewood, N. J	12,603				2			
Erie, Pa	76,592		4		2		2	
Eureka, Cal	15,142	4			3			
Evanston, Ill	29,304	8	1		57			
Everett, Mass	40,160	9	1				6	
Everett, Wash	37,205						7	
Fairmont, W. Va	16,111				11			
Fall River, Mass	129,828	31	4		44	2	1	
Fargo, N. Dak	17,872	3	1		3		2	
Farrell, Pa	10,190				1			
Findlay, Ohio	14,858	7			38	1		
Fitchburg, Mass	42,419	11						
Flint, Mich	57,386	8	3		2		1	
Fond du Lac, Wis	21,486	9					4	
Fort Dodge, Iowa	21,039	1		1				
Fort Scott, Kans	10,564	3			2			
Fort Wayne, Ind	78,014	22	3		13			
Fort Worth, Tex	109,597	18					1	
Framingham, Mass	14,149	7	2		4		3	
Frederick, Md	11,225	4			4			
Freeport, Ill	19,844	6			5		2	
Fremont, Ohio	11,034	1	2					
Fresno, Calif	36,314	10						

[1] Population Apr. 15, 1910.

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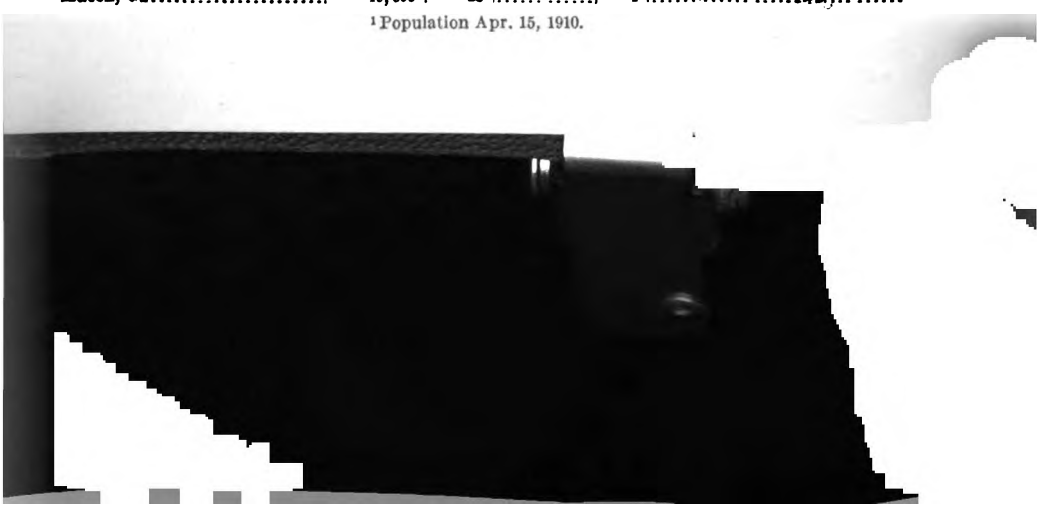
Hancock, Mich.	12,578	1							
Harrisburg, Pa.	73,276		1		185		15		
Harrison, N. J.	17,345		2				2	1	
Hartford, Conn.	112,831	33	5		2		1	4	2
Haverhill, Mass.	49,180	25		1	2				4
Hazelton, Pa.	28,981				8				
Hibbing, Minn.	17,550		1		1		3		
Highland Park, Mich.	33,859	4	4		7		4		
Hoboken, N. J.	78,324	14	4	2			2	5	3
Houston, Tex.	116,878	39						8	3
Hudson, N. Y.	12,898	3							
Hutchinson, Kans.	21,461		1					1	
Independence, Mo.	11,964	6						2	2
Indianapolis, Ind.	233,622		3		52		11	4	7
Iowa City, Iowa	11,626						1		
Ironton, Ohio	14,079	5						3	1
Ironwood, Mich.	15,095	1		1			1		
Ithaca, N. Y.	16,017	7			1		6	2	
Jamestown, N. Y.	37,431	7	2						
Janesville, Wis.	14,411	3							
Jersey City, N. J.	312,557		27		19		7	18	
Johnstown, N. Y.	10,678	4							
Johnstown, Pa.	70,473		3		12				
Joplin, Mo.	33,400	5						3	
Kalamazoo, Mich.	50,408	19	1		56		2	4	5
Kankakee, Ill.	14,270	8	1						
Kansas City, Kans.	102,096		1		15		1	3	
Kansas City, Mo.	305,816	74	9		8		3		8
Kearny, N. J.	24,325	3			9		1	2	
Kenosha, Wis.	32,833	7	5	1	25		7	2	
Knoxville, Tenn.	59,112		1				2		
Kokomo, Ind.	21,929	6	1				3		
Lackawanna, N. Y.	16,219	5			3				
La Crosse, Wis.	31,835	13	2					1	2
La Fayette, Ind.	21,481	9	1		2				
Lakewood, Ohio	23,813	6			1		1	1	1
Lancaster, Ohio	16,086	7			2				
Lancaster, Pa.	51,437		1		3		1	1	
Lawrence, Kans.	13,477	1	1						
Lawrence, Mass.	102,923	29	3	1			4	1	5
Lebanon, Pa.	20,947				8		2	2	
Leominster, Mass.	21,365	4			15				
Lexington, Ky.	41,997	20			12	1			2
Lima, Ohio	37,145	1	1		46		12	1	1
Lincoln, Nebr.	46,957	12			1		4		
Little Rock, Ark.	58,716	9					1	1	1
Lockport, N. Y.	20,028	4			22		3	2	
Logansport, Ind.	21,338	6			1		3		
Long Beach, Calif.	29,163						1		
Long Branch, N. J.	15,733	4					1		
Lorain, Ohio	38,266	8							1
Los Angeles, Calif.	535,485	140	6	1	6		9	33	24
Louisville, Ky.	240,808	70	4	2	5		16	6	9
Lowell, Mass.	114,366	35			6		1	10	5
Ludington, Mich.	10,566	6			1				1
Lynn, Mass.	104,534	24	3		31	1	5	5	1
McKeesport, Pa.	48,299				8		1	3	
Macon, Ga.	46,099	20			1				

[1] Population Apr. 15, 1910.



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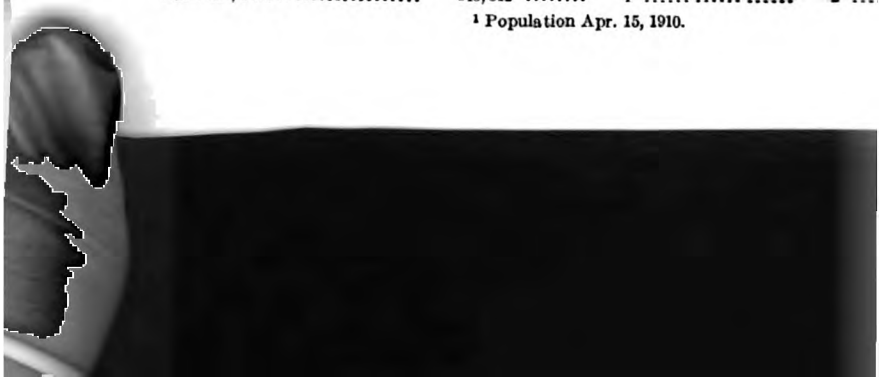
Marion, Ind.	19,923	4	1		1		1
Marion, Ohio	24,129		1		1		
Marlboro, Mass.	15,285	3			1		
Marquette, Mich	12,555	2			5		
Marshalltown, Iowa	14,519		1				1
Martinsburg, W. Va	12,984				1		1
Mason City, Iowa	14,938	2					
Medford, Mass	26,681	9					3
Melrose, Mass	17,724	9	1				2
Memphis, Tenn	151,877	56	7		26		9
Methuen, Mass	14,320	5					
Middletown, N. Y	15,890						
Middletown, Ohio	16,384	3					
Milford, Mass	14,280	1					
Milwaukee, Wis	445,008	94	6	1	6		15
Minneapolis, Minn	373,448	70	18	2	85		21
Missoula, Mont	19,075	6					2
Moline, Ill	27,976		2	1			
Monessen, Pa	23,070		2		2		3
Montclair, N. J	27,087				1		
Montgomery, Ala	44,039	23			1		
Morgantown, W. Va	14,444	4					
Morristown, N. J	13,410	5					
Mount Carmel, Pa	20,709		2		7		
Mount Vernon, N. Y	37,991	5	3		1		
Nanticoke, Pa	23,811				3		
Nashua, N. H	27,541	4					8
Nashville, Tenn	118,136	38	1		6	1	3
Natick, Mass	10,140	6					
Newark, N. J	418,789	85	38	1	14		14
New Bedford, Mass	121,622	32	4		12		3
New Britain, Conn	55,385	13	1		1		1
New Brunswick, N. J	25,855		3		1		
Newburgh, N. Y	29,893	5	1				
Newburyport, Mass	15,291	5	1				
New Castle, Pa	41,915						5
New Haven, Conn	152,275	47	7	1	12		
New London, Conn	21,199	7	2		3		1
New Orleans, La	377,010	129	7				4
Newport, Ky	32,133	6	1				
Newport News, Va	22,622	9			1		
Newport, R. I	30,585	6					3
Newton, Mass	44,345	7	1		1		
New York, N. Y	5,737,492	1,304	317	24	217	9	86
Niagara Falls, N. Y	38,466	15	3		1		1
Norfolk, Va	91,148		1		7		1
Norristown, Pa	31,969				24		5
North Adams, Mass	[1] 22,019	11					
Northampton, Mass	20,006	6	2				
North Tonowanda, N. Y	14,060	6			2	1	
Norwich, Conn	21,923	1					1
Norwood, Ohio	23,269	3			10		1
Oakland, Calif	206,405	49	8				5
Oak Park, Ill	27,816	6	1		57		1
Ogdensburg, N. Y	16,845	4					
Oil City, Pa	20,162		1		45		
Oklahoma City, Okla	97,588	10	2				
Olean, N. Y	16,927	10					
Omaha, Nebr	177,777	32	1		17		8
Orange, Conn	14,393	12			1		2
Ossining, N. Y	14,064	6	1		9		
Parkersburg, W. Va	21,059	3			1		3
Parsons, Kans	15,952						
Pasadena, Calif	49,620	16					
Passaic, N. J	74,478	7	1		1		2
Paterson, N. J	140,512		4				2

[1] Population Apr. 15, 1910.



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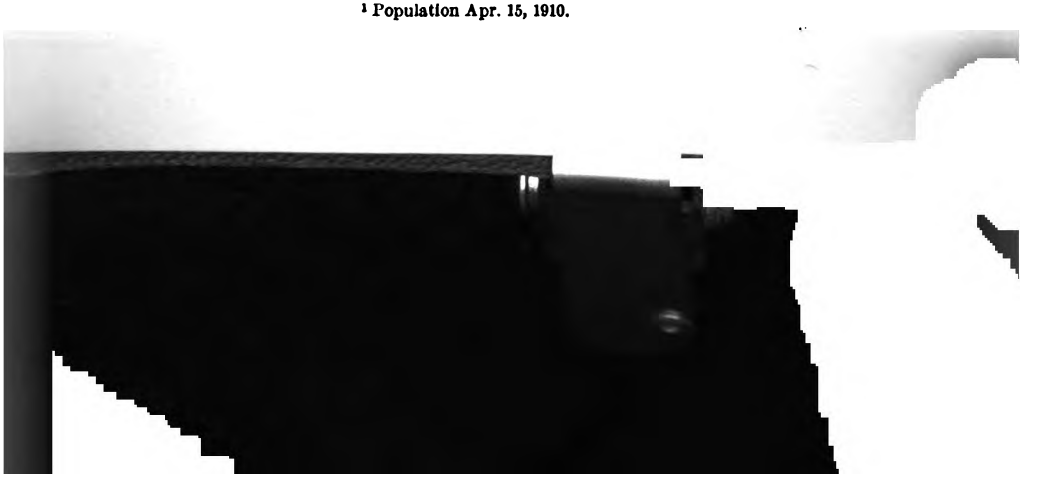
Plattsburg, N. Y.	13,111	2	1							
Plymouth, Mass.	14,001	3								1
Plymouth, Pa.	19,439				1					
Pocatello, Idaho	12,806						1			
Pomona, Calif.	13,624	3								
Pontiac, Mich.	18,006		6	1	8					
Port Chester, N. Y.	16,727	3					1			1
Portland, Me.	64,720	18					7			3
Portland, Oreg.	308,309		3		2		25		5	5
Portsmouth, Ohio	29,356		2							
Portsmouth, Va.	40,693	27	2		2				1	1
Pottstown, Pa.	16,987		3		5					
Poughkeepsie, N. Y.	30,786	18	3				2		4	2
Providence, R. I.	259,895	63	9	1	3	1	5			15
Pueblo, Colo.	56,084						4			
Quincy, Ill.	36,832	8					1		1	
Quincy, Mass.	39,022	13	6		2		2		1	2
Racine, Wis.	47,465	9			1				3	
Rahway, N. J.	10,361	1							2	
Raleigh, N. C.	20,274	9			1		1			
Reading, Pa.	111,007		2		3		1			
Redlands, Calif.	14,573	1					1		1	
Reno, Nev.	15,514	2			1					
Richmond, Va.	158,702	43			23		3		3	6
Riverside, Calif.	20,496	7								
Roanoke, Va.	46,282	14	1		35					
Rochester, N. Y.	264,714	85	9		7		9		14	5
Rockford, Ill.	56,730	19	1		7		4			1
Rock Island, Ill.	29,452	6			3					
Rocky Mount, N. C.	12,673	4	1							
Rome, N. Y.	24,259		1		17				1	
Rutland, Vt.	15,038	4							1	1
Sacramento, Calif.	68,964	26					6		4	4
Saint Cloud, Minn.	12,013				1					
St. Joseph, Mo.	96,498	16	2		1				1	1
St. Louis, Mo.	768,630	191	67	4	145	3	15		45	20
St. Paul, Minn.	252,465	45	30		96	1	6	1	17	7
Salem, Mass.	49,346	11	2	1			5		1	2
Salem, Oreg.	21,274	2					2			
Salt Lake City, Utah	121,623	28	1		1		4			2
San Angelo, Tex.	[1]10,321	1								1
San Antonio, Tex.	128,215	10							9	7
San Bernardino, Calif.	17,616	10								5
San Diego, Calif.	56,412	23	1		1		7			1
Sandusky, Ohio	20,226	6	1						1	
Sanford, Me.	11,217	7								1
San Francisco, Calif.	471,623	117	20	3	3		2		20	10
San Jose, Calif.	39,810						3		1	1
Santa Barbara, Calif.	15,360	3	1							
Saratoga Springs, N. Y.	13,339	5			1					
Saugus, Mass.	10,210	3	1		7		2			
Sault Ste. Marie, Mich.	14,130	3		1						1
Savannah, Ga.	69,250	26	1						2	2
Schenectady, N. Y.	103,774	16			1	1	3		6	4
Scranton, Pa.	149,541		4				5			
Seattle, Wash.	366,445		6				16		19	
Shamokin, Pa.	21,274		7		15					
Sharon, Pa.	19,156				1		1			
Somerville, Mass.	88,618	25	5		3		1		6	4

[1] Population Apr. 15, 1910.



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Terre Haute, Ind	67,361	15	1		2		1
Tiffin, Ohio	12,962	8					
Toledo, Ohio	202,010	62	2		168		6
Topeka, Kans	49,538	7	1				1
Trenton, N. J	113,974	41	1		85		1
Troy, N. Y	78,094	28	2				
Tulsa, Okla	32,507						
Tuscaloosa, Ala	10,824	1	1				
Utica, N. Y	89,272	18	5		1		3
Vallejo, Calif	13,803	2					
Virginia, Minn	15,954		1				
Waco, Tex	34,015	9					1
Wakefield, Mass	12,947	2					
Walla Walla, Wash	26,067						
Waltham, Mass	31,011	9	1				
Warren, Pa	15,083						1
Washington, D. C	369,282		32	3	8		18
Washington, Pa	22,076		4				
Waterbury, Conn	89,201	1	6	1	16		6
Watertown, Mass	15,188				2		
Watertown, N. Y	30,404		1		1		
Wausau, Wis	19,666	4					1
Webster, Mass	13,484	4			1		
West Chester, Pa	13,403		1		8		3
Westfield, Mass	18,769	2	2		1		
West Hoboken, N. J	44,386	9	1				1
West New York, N. J	19,613	4	1				
West Orange, N. J	13,964	2	3		3		2
Wheeling, W. Va	43,657	15	2				
Wichita, Kans	73,597	24	1		1		
Wilkes-Barre, Pa	78,334		1		18		3
Wilkinsburg, Pa	23,899		1		1		
Williamsport, Pa	34,123		3		16		2
Wilmington, Del	95,369	22	4		2		2
Wilmington, N. C	30,400	11					
Winchester, Mass	10,812	3					
Winston-Salem, N. C	33,136	21	2		14		
Winthrop, Mass	13,105						3
Woburn, Mass	16,076	4					
Worcester, Mass	166,106	44	6		26	3	6
Yakima, Wash	22,038						3
Yonkers, N. Y	103,066	26	1		6		3
York, Pa	52,770		2		2		3
Youngstown, Ohio	112,282	34	2		50	1	3
Zanesville, Ohio	31,320	6					

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received During Week Ended June 27, 1919—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Rio de Janeiro	Apr. 20–May 3	10	13	
Canada:				
Nova Scotia—				
Halifax	June 1–7	24		Present in 12 localities and in unstated districts in Richmond County.
Sydney	May 25–June 7	5		
Ontario—				
Hamilton	June 8–14	1		
Quebec—				
Quebec	June 1–7	4		
Ceylon:				
Colombo	Apr. 20–May 3	7		
China:				
Chungking	Apr. 20–May 3			Present.
Nanking	May 4–17			Do.
France:				
Paris	May 4–17	3		
Great Britain:				
Cardiff	May 11–31	5		
India:				
Bombay	Mar. 24–Apr. 26	401	225	
Calcutta	Apr. 27–May 3		98	
Rangoon	Apr. 20–26	40	28	
Italy:				
Milazzo	May 19–25	6		Province of Messina.
Naples	May 19–25	34	30	
Palermo	May 9–15	10		
Manchuria:				
Dairen	May 6–12	2	1	
Mexico:				
Guaymas				Present in April and May, 1919
Newfoundland:				
St. Johns	May 31–June 13	20		Outports, 18 cases.
Portugal:				
Oporto	May 11–24	28	23	
Spain:				
Barcelona	Apr. 24–May 14		7	
Madrid	Apr. 1–30		4	
Valencia	Apr. 27–May 10	119	9	

TYPHUS FEVER.

China:				
Tsingtao	May 5–11	1		
Great Britain:				
Glasgow	May 11–24	5	2	
Japan:				
Nagasaki	May 12–18	1		
Portugal:				
Oporto	May 11–24	145		

Reports Received from Dec. 28, 1918, to June 27, 1919.

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon:				
Colombo	Nov. 17–30	4	5	
China:				
Swatow	June 3			Present.
Germany:				
Berlin	To Oct. 5	17	11	
Bremen	Oct. 13–19	1		On a barge.
Marienwerder				1 case in October, 1918, on a barge in canal.

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RA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

eports Received from Dec. 28, 1918, to June 27, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
.....	Aug. 18-Dec. 28...	1,354	1,031	
.....	Dec. 29-Apr. 26...	9,739	8,539	
.....	Sept. 20-Dec. 21....	.....	241	Reports for weeks ended Nov. 23, 1918, and Mar. 29, 1919, missing.
.....	Dec. 29-May 3....	.....	2,377	
.....	Jan. 26-Mar. 22....	3	3	
.....	Oct. 5-Dec. 28.....	264	164	Oct. 27-Nov. 2, 1918: Cases, 9; deaths, 4.
.....	Jan. 5-Apr. 19.....	430	300	
i.....	Oct. 5-Dec. 21.....	35	35	
.....	Dec. 29-Apr. 26...	71	56	
.....	.....	.....	.....	July 1-Oct. 31, 1918: Cases, 753; deaths, 472.
.....	July 1-Aug. 31....	37	30	
la.....	July 1-Oct. 31.....	324	171	
hina.....	....do.....	436	337	
on.....	Oct. 7-Dec. 22.....	75	45	
Do.....	Dec. 3-Apr. 20....	573	358	City and district.
Chow-Wan.....	July 1-31.....	50	34	
.....	July 1-Oct. 31.....	6	.....	
a.....	.....	.....	.....	
baya district.....	Oct. 7-Dec. 31....	655	423	Oct. 7-Dec. 31, 1918: Cases, 381; deaths, 323. Jan. 1-Apr. 1, 1919: Cases, 1,171; deaths, 967.
Do.....	Jan. 1-Apr. 1.....	565	394	
a.....	.....	.....	.....	Sept. 25-Dec. 18, 1918: Cases, 3,282; deaths, 2,014. Jan. 24-Mar. 27, 1919: Cases, 3,375; deaths, 2,534.
arang.....	Sept. 26-Oct. 16...	120	111	
ra.....	.....	.....	.....	Oct. 3-Dec. 11, 1918: Cases, 412; deaths, 238. Dec. 27, 1918-Apr. 17, 1919: Cases, 24; deaths, 11.
via.....	Oct. 3-Dec. 11.....	291	148	
Do.....	Dec. 27-Apr. 17...	16	4	
ibon.....	Jan. 3-Mar. 3.....	3	.....	
a:	.....	.....	.....	
.....	Oct. 11-18.....	8	.....	
slands:	.....	.....	.....	
.....	Sept. 22-Dec. 28...	209	135	
.....	Dec. 29-May 3....	53	24	
s.....	.....	.....	.....	Nov. 2-Dec. 28, 1918: Cases, 1,986; deaths, 1,515. Dec. 29, 1918-May 3, 1919: Cases, 1,537; deaths, 1,077.
y.....	Dec. 15-21.....	1	1	
os Camarines.....	Feb. 15-21.....	10	2	
an.....	Nov. 17-Dec. 28...	38	32	
Do.....	Jan. 5-11.....	2	2	
ngas.....	Nov. 2-Dec. 28....	258	230	
Do.....	Dec. 29-May 3.....	103	77	
l.....	Nov. 2-Dec. 28....	29	24	
Do.....	Dec. 29-Apr. 12...	108	71	
an.....	Oct. 12-Dec. 28....	51	8	
Do.....	Dec. 29-Feb. 21...	42	26	
.....	Dec. 22-28.....	7	5	
Do.....	Jan. 5-25.....	28	14	
c.....	Oct. 27-Dec. 21....	207	115	
Do.....	Dec. 29-Apr. 19...	18	17	
.....	Nov. 10-Dec. 21...	59	27	
Do.....	Jan. 12-Apr. 19....	20	15	
s Sur.....	Dec. 8-28.....	17	8	
Do.....	Dec. 29-Feb. 15...	56	38	
.....	Oct. 27-Dec. 21....	112	78	
Do.....	Jan. 5-Apr. 12.....	173	109	
na.....	Oct. 27-Dec. 28....	18	11	
Do.....	Dec. 29-May 3.....	255	191	
o.....	Jan. 5-11.....	8	4	
oro.....	Nov. 21-30.....	7	14	
nis.....	Oct. 27-Dec. 28....	81	53	
Do.....	Jan. 5-Mar. 29.....	154	88	
a Ecija.....	Jan. 12-25.....	9	6	
ental Negros.....	Feb. 2-Mar. 22....	10	7	
tal Negros.....	Nov. 2-Dec. 7.....	32	18	
Do.....	Jan. 5-Feb. 15.....	35	23	
anga.....	Nov. 24-Dec. 14...	4	4	
Do.....	Jan. 5-May 3.....	186	137	
sman.....	Nov. 2-Dec. 28....	930	652	
o.....	Dec. 29-Apr. 19...	170	131	
.....	Oct. 27-Nov. 2....	3	1	
o.....	Nov. 24-30.....	16	5	
r.....	Dec. 15-21.....	8	1	
gon.....	Nov. 17-23.....	8	4	
o.....	Jan. 19-Feb. 8.....	44	36	
as.....	Nov. 3-Dec. 28.....	99	40	
o.....	Dec. 29-Feb. 15...	99	62	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Philippine Islands—Continued.				
Provinces—Continued.				
Union	Nov. 2-Dec. 28	18	14	
Zamboanga	Dec. 8-28	27	19	
Do	Jan. 5-Feb. 8	25	21	
Poland:				
Plonsk district	Oct. 2-Nov. 27	5		
Warsaw	Sept. 29-Oct. 26	5	1	
Russia:				
Petrograd	To July 16	3,388	1,654	
Do	July 17-Sept. 11	3,479	1,455	In civil and military hospitals. In military hospitals, July 1-Aug. 21, 1918: Cases, 681, deaths, 783. In municipal hospitals, Oct. 1, 1918: Cases, 258
Siam:				
Bangkok	Mar. 23-Apr. 5	6	2	
Ukrania:				
Ekaterinaslav	Sept. 1-20	7	6	
Odessa	do	25		Sept. 1-28, 1918: 40 cases on s. s. Helena.

PLAGUE.

Brazil:				
Porto Alegre				Present in April, 1919
Ceylon:				
Colombo	Oct. 27-Nov. 2	1	1	
Do	Jan. 4-Apr. 5	5	4	
China:				
Amoy	Nov. 24-Dec. 8			Do.
Chungking	Dec. 1-7			Do.
Hing-Ning district	Mar. 15			Do.
Hongkong	Oct. 1-Dec. 28	6	4	
Do	Jan. 1-May 3	21	7	May 4-17, 1919: Deaths, 65. May 18-31, 1919: Cases, 71. June 1-6, 1919: Cases, 41, deaths, 2. June 8-14, 1919: Cases, 42, deaths, 33.
Ecuador:				
Duran	Feb. 16-Mar. 16	2	1	
Guayaquil	July 1-Dec. 31	20	7	
Do	Jan. 1-Apr. 30	85	17	
Taura	Dec. 16-31	1	1	
Egypt				Jan. 1-Nov. 27, 1918: Cases, 297, deaths, 153. Jan. 1-May 1, 1919: Cases, 232, deaths, 144.
Cities—				
Alexandria	Mar. 23	1	1	
Suez	Jan. 31-Apr. 29	73	44	
Provinces—				
Assiout	Feb. 24-Apr. 17	22	13	16 septicemic.
Beni-Souef	Apr. 22	1	1	
Fayoum	Apr. 26	13	3	
Girgeh	Feb. 22-Mar. 22	10	5	2 pneumonic.
Minieh	Feb. 21-Apr. 22	3	3	1 pneumonic.
India				Sept. 23-Dec. 28, 1918: Cases, 24,279; deaths, 18,369. Dec. 29, 1918-Mar. 1, 1919: Cases, 25,188, deaths, 19,401. Mar. 9-15, 1919: Cases, 13,981; deaths, 9,682.
Bombay	Aug. 18-Dec. 28	41	29	
Do	Jan. 12-Apr. 26	366	205	
Calcutta	Dec. 22-28		1	
Do	Jan. 12-May 3		183	
Karachi	Oct. 19-Dec. 28	17	17	
Do	Dec. 29-May 7	72	60	
Madras	Dec. 8-28	28	17	
Do	Dec. 29-Apr. 5	205	117	
Madras Presidency	Oct. 13-Dec. 28	1,152	774	Mar. 30-Apr. 12, 1919: Cases, 6,854; deaths, 5,550. Apr. 13-20, 1919: Cases, 5,913; deaths, 4,671.
Do	Dec. 29-Apr. 19	2,553	1,763	
Rangoon	Oct. 5-Dec. 21	84	61	Oct. 27-Nov. 2, 1918: Cases, 162; deaths, 38.
Do	Dec. 29-May 19	634	407	
Indo-China				July 1-Oct. 21, 1918: Cases, 197; deaths, 146.
Anam	July 1-Oct. 31	42	36	
Cambodia	do	72	72	
Cochin-China	do	65	35	
Saigon district				Jan. 13-Apr. 28, 1919: Cases, 32; deaths, 28.
Cholon	Apr. 7-20	1		
Saigon	Oct. 7-Nov. 26	5	1	
Do	Apr. 7-20	1		
Kwang-Chow-Wan	July 1-31	1	1	

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tA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

ports Received from Dec. 28, 1918, to June 27, 1919—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
a				Oct. 7–Nov. 18, 1918: Cases, 109; deaths, 109. Jan. 1–Apr. 1, 1919: Cases, 238; deaths, 238. Sept. 25–Oct. 16, 1918: Cases, 14; deaths, 14. Jan. 30–May 14, 1919: Cases, 220; deaths, 220.
baya (district)	Oct. 7–Dec. 31	92	92	
Do	Jan. 1–Apr. 1	59	59	
rang	Sept. 25–Oct. 16	6	6	
Do	Mar. 21–27	7	7	
	Nov. 16–29	5	2	
	Feb. 22–May 18	222	133	
	Sept. 21–Oct. 12	6	5	
	Jan. 19–Feb. 22	7	6	
	Dec. 30	1		
an	Jan. 14	1	1	At Suez quarantine station from Bombay.
rta	May 21	1	1	At Liverpool, England, from Bombay.

SMALLPOX.

	Oct. 1–Dec. 31	2	1	
	Mar. 1–31	1	1	
	Apr. 14–21		1	
				Dec. 1, 1918–Jan. 11, 1919: Cases, 68. Jan. 12–Mar. 15, 1919: Cases, 154.
	Dec. 1–Jan. 11	6		
	Feb. 9–Mar. 15	28		
				Feb., 1919: Reported prevalent.
	Feb.–Mar.	974	19	Mar., 1919: Cases, 57.
	Mar. 30–Apr. 5	5		
neiro	Dec. 1–28	46	19	Oct. 6–12, 1918: Cases, 15; deaths, 10.
	Dec. 30–May 3	52	32	
o	Mar. 3–Apr. 23		4	
Africa:				
	Sept. 1–Nov. 30	6	1	
nswick—				
bellton	Dec. 22–28	1		
o	Jan. 5–May 10	4		
hn	Nov. 8–14	3		
o	Jan. 26–Feb. 22	6		
tia—				
River	Dec. 29–Jan. 4			Present.
e	Jan. 10			Do.
Sable Island	May 13			Present on south side.
y	Jan. 4			Present.
ax	Dec. 7–28	10		
o	Jan. 5–June 7	391		Present in 20 other localities.
leton	Dec. 29–Jan. 4			Present.
ey	Jan. 5–June 7	38		
lton	June 8–14	1		
Bay	Jan. 19–25	1		
va	Jan. 12–May 31	14		
to	Feb. 2–15	2		
o	Mar. 16–22	1		
lward Island—				
otte Town	Feb. 27–Apr. 16	2		
real	Jan. 24–Dec. 21	2		
o	Jan. 12–May 10	32		
biac	Jan. 12–Mar. 8	8		
ec	Dec. 15–21	1		
o	Dec. 29–June 7	35		
	Jan. 12–May 3	12		

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Tientsin	May 4–10	1		
Tsingtao	Mar. 3–9	2		
Chosen (Korea):				
Chemulpo	Nov. 1–Dec. 31	15	4	
Do	Jan. 1–Mar. 31	16	7	
Fusan	Feb. 1–Mar. 31	20	16	
Seoul	Feb. 1–Mar. 31	3	1	
Colombia:				
Barranquilla	Apr. 6–12		1	
Denmark:				
Copenhagen	Nov. 9–Dec. 28	12		
Do	Dec. 29–May 3	121		
Egypt:				
Alexandria	Dec. 17–23	1	1	
Do	Jan. 22–May 13	80	24	
Finland				Jan. 1–Apr. 15, 191
Provinces:				
Abo Och Björneborg	Jan. 1–Apr. 15	91		
Kuopio	do	188		
Nyland	do	25		
St. Michael	do	135		
Tavastehus	do	16		
Alcaborg	do	1		
Vasa	do	16		
Viborg	do	464		
France:				
Bordeaux	Feb. 8–13		1	
Brest	Feb. 2–8	1		
Paris	Mar. 2–May 17	20	3	
Germany				Nov. 24–Dec. 7, 1
Dresden	Nov. 24–Dec. 7	18		Dec. 8, 1918–Ju
Friedland	do	1		Cases, 177. Ad
Halle	do	4		reported later,
				ended Jan. 11.
				22, 1919: Cases,
				soldiers and pri
				745 cases.
Königsberg	do	8		In persons evacu
Schkeuditz	do	1		Ukraine.
Tilsit	do	1		
Torgau	do	1		
Germany:				
Aix-la-Chapelle (district)	Dec. 8–Jan. 11	17		
Cassel	do	10		
Danzig	do	3		
Doristhal	do	8		District of Gumbi
Dresden	Dec. 8–Feb. 15	247		26 additional cases
Halle	Dec. 8–Jan. 11	5		at Dresden.
Hanover	do	7		Among interned R
Königsberg	do	15		
Kottowitz	do	5		
Meyrode	do	6		
Riesa	do	4		District of Dresde
Great Britain:				
Cardiff	May 11–31	5	1	
Liverpool	Jan. 26–Mar. 15	7		Of these, 2 from ve
London	Mar. 9–May 17	17	2	
Southampton	May 18–24	1		

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Saloniki	Feb. 2-May 10		87	
India:				
Bombay	Aug. 18-Dec. 28	35	8	
Do	Dec. 29-Apr. 26	834	414	
Calcutta	Sept. 29-Dec. 28		17	Reports for weeks ended Nov. 23, 1918, and Mar. 29, 1919, missing.
Do	Dec. 29-May 3		785	
Karachi	Sept. 29-Dec. 28	13	4	
Do	Dec. 29-May 3	176	86	
Madras	Oct. 5-Dec. 28	62	40	
Do	Dec. 29-Apr. 19	295	131	
Rangoon	Oct. 20-Dec. 21	32	6	
Do	Dec. 29-Apr. 26	1,190	488	
Indo-China				July 1-Oct. 31, 1918: Cases, 620; deaths, 254.
Anam	July 1-Oct. 31	146	67	
Cambodia	Aug. 1-Oct. 31	165	74	
Cochin-China	July 1-Oct. 31	460	112	
Saigon	Oct. 7-Dec. 22	20	5	
Do	Dec. 30-Apr. 6	110	21	City and vicinity. Apr. 7-20, 1919: District, cases, 33; city, 1.
Tonkin	July 1-Oct. 31	20	1	
Italy:				
Andria	Mar. 10-16	1		Province of Bari.
Barletta	Mar. 3-9	2		Do.
Castrorcale	May 12-18	1	1	
Genoa	Jan. 9-Mar. 15	4	2	
Lecce (Province)	Feb. 17-23	2		
Leghorn	Apr. 14-30	1		
Messina	Mar. 2-May 18	7		Cases reported in several localities in Province, Mar. 2-30.
Milazzo	May 12-25	11	1	
Naples	Mar. 10-May 25	109	92	
Palermo	Jan. 31-May 15	63	2	
Turin	Jan. 27-Mar. 23	9	2	
Japan:				
Kobe	Oct. 26-Dec. 28	186	46	
Do	Dec. 29-May 3	630	220	
Nagasaki	Mar. 31-Apr. 6	3		
Nagoya	Mar. 2-15	2		
Taihoku	Jan. 15-Apr. 29	152	18	Island of Formosa.
Tokyo	Apr. 26	1		
Yokohama	Jan. 20-Apr. 27	2		
Java:				
East Java				Oct. 7-Dec. 31, 1918: Cases, 22; deaths, 1. Jan. 1-Feb. 25, 1919: Cases, 4; deaths, 3.
Surabaya (district)	Oct. 7-Dec. 31	16		
Do	Jan. 1-Feb. 25	4	2	
Mid-Java				Sept. 25-Dec. 18, 1918: Cases, 172; deaths, 3. Jan. 24-30, 1919: Case, 1.
West Java				Oct. 2-Dec. 11, 1918: Cases, 809; deaths, 263. Dec. 27, 1918-Apr. 7, 1919: Cases, 710; deaths, 153.
Batavia	Oct. 2-Dec. 11	185	151	
Do	Dec. 27-Apr. 17	54	31	
Lithuania				Sept. 1-Oct. 16, 1918: Cases, 44.
Manchuria:				
Dairen	Jan. 15-21	1		
Do	Feb. 22-May 12	7	3	
Mesopotamia:				
Bagdad	Oct. 11-Dec. 27	308	97	
Do	Dec. 28-Feb. 9	8		
Mexico:				
Ciudad Juarez	Nov. 24-30	1		
Guadalajara	Mar. 1-31	1		
Do	Mar. 29-Apr. 30	1		
Guaymas				Present in April and May, 1919.
Mexico City	Sept. 22-Dec. 28	23		
Do	Dec. 29-May 3	28		
Vera Cruz	Feb. 10-Apr. 12	2	1	
Newfoundland				Outports—Dec. 6-27, 1918: Cases, 78. Dec. 28, 1918-June 13, 1919: Cases, 351.
St. Johns	Dec. 6-20	4		
Do	Jan. 24-June 13	71		
Panama				Aug. 1-31, 1918: Cases, 133, occurring at Colon, Panama, and points in the interior. Jan. 1-25, 1919: Cases, 28.
Colon	Dec. 15-21	1		
Do	Dec. 29-Feb. 9	8		
Philippine Islands:				
Manila	Nov. 2-16	5	3	
Do	Dec. 29-Apr. 19	43	22	Varioloid, 16.
Portugal:				
Lisbon	Nov. 16-Dec. 28	843		
Oporto	Mar. 9-May 24	176	121	

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Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portuguese East Africa:				
Lourenco Marques				July 1-Oct. 31, 1918: 45 fatal cases.
Siberia:				
Vladivostok	Nov. 1-3	4		
Do	Jan. 17-23		1	
Do	Feb. 1-Mar. 15	16	1	
Spain:				
Barcelona	Jan. 9-Feb. 11		5	
Do	Feb. 19-May 14	6	0	
Bilbao	Jan. 1-Feb. 20	6		
Cadiz	Oct. 1-Dec. 31	18		
Do	Jan. 1-Mar. 31		35	
Madrid	Sept. 1-Oct. 31		153	
Do	Jan. 1-Apr. 30		85	
Seville	Nov. 1-Dec. 31		8	
Do	Jan. 1-Mar. 31		5	
Valencia	Nov. 10-Dec. 31	40	0	
Do	Dec. 29-Jan. 25	98	10	
Do	Feb. 16-May 10	635	54	
Straits Settlements:				
Penang	Oct. 6-12	1		
Singapore	Feb. 2-22	3		
Sweden:				
Stockholm	Feb. 2-8		1	
Tunis:				
Tunis	Apr. 26-May 8	5	1	
Union of South Africa:				
Cape Town	Aug. 1-30	1		
Do	Dec. 21-Jan. 31	1		
Johannesburg	Aug. 1-Oct. 31	12		Nov. 1-30: Cases, 4.
On vessels:				
S. S. Euripides	Mar. 21	1		From England via Suez and Colombo. Case removed at Colombo. Vessel arrived Fremantle, Australia, Apr. 10.
S. S. Port Sydney	Mar. 13	1	1	From Egypt to Australia via Colombo. Arrived Fremantle Mar. 31.
S. S. Ulimaroa	Mar. 26	1		From Egypt via Colombo. Case developed after arrival at Colombo. Vessel arrived at Fremantle, Australia, Apr. 5.

TYPHUS FEVER.

Algeria:				
Algiers	Nov. 1-30	1		
Austria				Dec. 1, 1918-Jan. 11, 1919: Cases, 128. Jan. 12-Mar. 15, 1919: Cases, 479.
Vienna	Dec. 1-Jan. 11	110		Occurring almost exclusively in repatriated soldiers and their contacts.
Do	Jan. 12-Mar. 15	410		
Brasil:				
Ceara	Sept. 14-21	1		
Rio de Janeiro	Dec. 15-22	2		
Do	Dec. 29-Feb. 22	29	3	
Sao Paulo	Jan. 13-19	3		
Bulgaria:				
Aeteven	Mar. 10			Present.
Rustchuk	do			Do.
China:				
Antung	Dec. 2-15	2		
Do	Jan. 6-Apr. 20	3	1	
Chosen (Korea):				
Fusan	Feb. 1-28	1	1	
Seoul	Jan. 1-Feb. 28	12	1	
Colombia:				
Barranquilla	Nov. 8-Dec. 28		3	
Do	Jan. 5-Mar. 8	2	3	
Egypt:				
Alexandria	Oct. 14-Dec. 31	85	26	
Do	Jan. 1-May 13	987	255	Confined to one quarter of city and mostly to natives. Oct. 20-Nov. 7, 1918: Cases, 12; deaths, 1.

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Finland				Jan. 1-Apr. 15, 1919: Cases, 80.
Provinces—				
Abo Och Björneborg	Jan. 1-Apr. 15	61		
Nyland	do	17		
Uleaborg	Mar. 1-31	1		
Viborg	Apr. 1-15	1		
France:				
Marseille	Mar. 1-31			Apr. 26, 1919, present in 2 civil and 2 military prisons.
Germany:				
Breslau	Sept. 29-Oct. 19	12	8	
Gumbinnen district	Oct. 20-Nov. 7	1		
Dresden	do	1		
Grieſswald	do	1		
Godullahutte	do	1		
Königsberg	Sept. 29-Oct. 19	3	1	
Königshutte	Oct. 20-Nov. 7	1	1	
Magdeburg	do	2		
Mcstalten	Sept. 29-Oct. 19	7	2	District of Allenstein.
Oppeln district	Oct. 20-Nov. 7	5		
Great Britain:				
Cork	Feb. 2-Mar. 22	4	1	
Glasgow	Dec. 22-28	5		
Do	Jan. 5-Feb. 8	9	1	
Do	Mar. 9-15	1		
Liverpool	May 11-17	1		From vessel.
Greece:				
Athens	Mar. 8	2	2	
Saloniki	Sept. 29-Dec. 21		34	
Do	Dec. 29-May 10		117	
Hungary				Sept. 9-Nov. 20, 1918: Cases, 110; deaths, 8. Nov. 27, 1918-Feb. 2, 1919: Cases, 473.
Budapest	Sept. 3-Nov. 26	75	2	
Do	Jan. 13-Feb. 2	131	7	Nov. 27, 1918-Jan. 12, 1919: Cases, 159.
Debreczin	Jan. 20-Feb. 2	42		
Pressburg	Sept. 29-Nov. 6	11	1	
Szatmarnemeti	Nov. 4-26	1		Present in county of Bihar.
Tyrnau	do	1		
Italy:				
Aquila Province	Apr. 28-May 4	24		One locality. Prisoners of war.
Arezzo Province	Apr. 7-May 4	5		At Arezzo.
Avellino Province	Apr. 28-May 4	1		
Bari Province	Feb. 3-May 4	19		
Belluno Province	Apr. 7-13	1		
Caltanisetta Province	Apr. 28-May 4	1		
Caserta Province	do	85		
Florence	Apr. 7-May 4	22		
Genoa	Apr. 28-May 4	6		
Leghorn	Apr. 14-27	9	2	
Naples	Feb. 3-May 11	15		
Novara Province	Apr. 7-13	1		
Pisa Province	Apr. 28-May 4	4		
Porto Maurizio Province	do	1		
Reggio Calabria Province	do	1		
Rome Province	do	17		
Salerno Province	do	5		
Taranto	Feb. 3-Apr. 13	4		
Udine Province	Apr. 7-13	13		At Cividale, 11 cases; at Udine, 2.
Venice Province	Apr. 28-May 4	8		
Japan:				
Nagasaki	Nov. 10-Dec. 29	13	4	
Do	Dec. 30-May 4	53	6	
Java:				
East Java				Oct. 7-21, 1918: Cases, 5.
Surabaya	Oct. 7-21	4		
Mid-Java				Sept. 25-Oct. 16, 1918: Cases, 3.
West Java				Oct. 2-23: Cases, 31: deaths, 6.
Batavia	Oct. 2-23	15	4	
Lithuania				Sept. 1-Oct. 26, 1918: Cases, 539; deaths, 26.
Macedonia:				
Drama	Mar. 17			Present.
Epirus	Mar. 21			Do.
Kavala	Mar. 17	300		Estimated.
Mesopotamia:				
Bagdad	Oct. 5-Dec. 27	2		
Do	Dec. 28-Apr. 11	15	2	

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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.

Reports Received from Dec. 28, 1918, to June 27, 1919—Continued.

TYPHUS FEVER—Continued.

Place	Date.	Cases.	Deaths.	Remarks.
Mexico:				
Aguascalientes	Feb. 2-23		3	
Do	Mar. 24-Apr. 13		4	
Guadalajara	Nov. 1-Dec. 31	4	1	
Do	Jan. 1-Apr. 30	9	5	
Mexico City	Sept. 22-Dec. 28	434		
Do	Dec. 29-May 3	644		
Netherlands:				
Amsterdam	Dec. 8-14	1		
Do	Jan. 12-Apr. 12	6		
Delft	Feb. 26			Present.
Harlem	do			Do.
Leiden	do			Do.
Limburg	do	5	1	Mining district.
Naaldwijk	Mar. 30-Apr. 19	4		
Rotterdam	Feb. 2-Apr. 12	507	90	Jan. 26-Feb. 27, 1919: Cases, 402; deaths, 46.
Schiedam	Feb. 26			Present.
Wateringen	Mar. 30-Apr. 5	1		
Poland				Sept. 29-Oct. 26, 1918, Cases, 572; deaths, 80.
Lodz	Sept. 29-Oct. 26	55	8	
Warsaw	do	111	13	
Portugal:				
Braga	Mar. 24			
Oporto	Mar. 8-May 10	869		
Russia:				
Archangel	Jan. 15-Apr. 15	224	63	
Serbia:				
Belgrade	Feb. 5	62		Among soldiers and prisoners.
Siberia:				
Vladivostok	Sept. 1-Dec. 30	43		
Do	Jan. 17-Mar. 15	143	15	
Spain:				
Huelva	Oct. 1-31		2	
Madrid	Dec. 1-31		1	
Tunis:				
Tunis	Apr. 12-May 8	4	2	
Ukrania				Apr. 5, 1919: Reported to be spreading.
Union of South Africa:				
Port Elizabeth	Sept. 14-28			Present among natives in several interior towns.

YELLOW FEVER.

Brazil:				
Bahia	Jan. 12-Mar. 1	5	2	
Pernambuco	Oct. 1-Nov. 30	2	1	
Colombia:				
Cartagena	Jan. 29-Feb. 4		4	
Ecuador:				
Babahoyo	Nov. 1-30	1		
Do	Mar. 1-15	1		
Catarama	Feb. 1-15	1		
Chobo	Jan. 1-15	1		
Daule	do	1	1	
Duran	Nov. 1-Dec. 31	3	2	
Do	Jan. 16-Mar. 15	5	1	
Guayaquil	July 1-Dec. 31	326	177	
Do	Jan. 1-Mar. 31	124	66	
Hacienda Valmila	Feb. 16-28	1		
Milagro	Nov. 1-15	1		
Do	Feb. 1-Mar. 15	2	1	
Naranjal	Nov. 1-15	1	1	
Do	Jan. 1-15	1	1	
Naranjito	Nov. 1-15	1	1	
Do	Jan. 1-Feb. 28	2	2	
Payo (Hacienda)	Nov. 1-15	1		
Punta de Piedra	Nov. 1-30	1		
Salvador:				
San Salvador	Jan. 9	1		
On vessel:				
S. S. Jamaica	Jan. 30	1		At quarantine station, Canal Zone, Panama.

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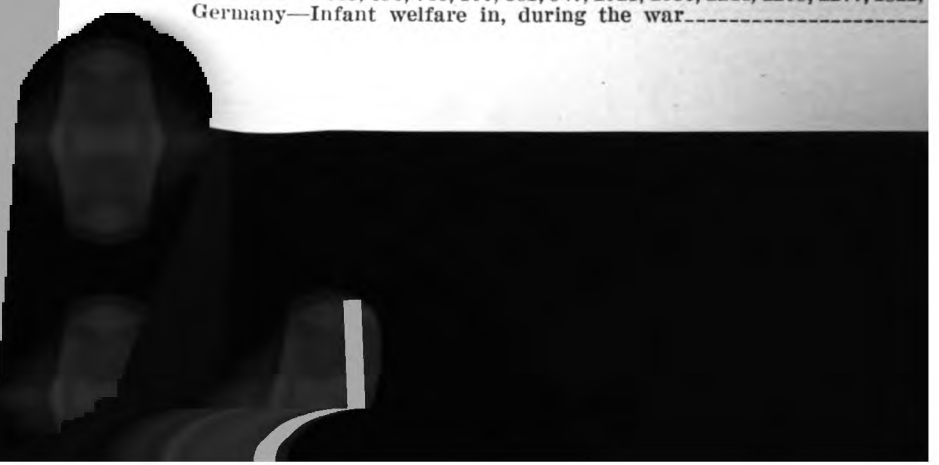

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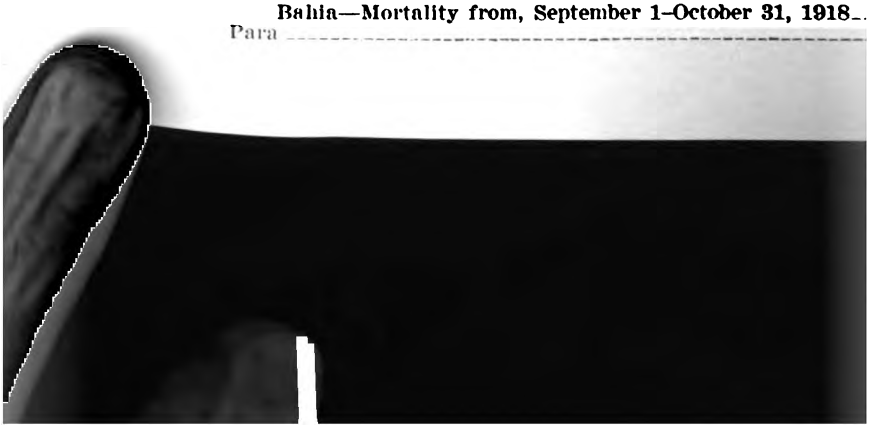

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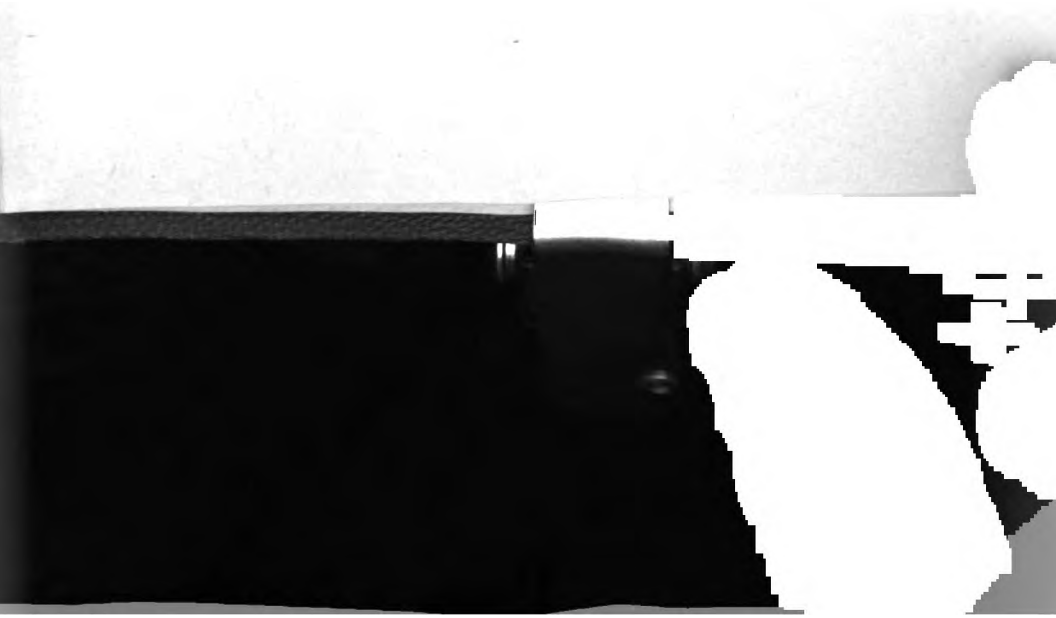

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